

# THE ARCHITECTS'



## JOURNAL

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CHRISTIAN BARMAN, *Editor*

*The Editor will be glad to receive MS. articles, and also illustrations of current architecture in this country and abroad, with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.*

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#### THIS WEEK'S WORKING DRAWINGS.

The subject of THE ARCHITECTS' JOURNAL Working Drawings Series included with the present issue is one of the blocks at the Midland Agricultural College now being built by Messrs. Pick, Everard, Keay and Gimson. In addition to the block illustrated, the architects' additions include a hostel for women students.

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# RENDERINGS OF ARCHITECTURE

*Selected and annotated by Dr. Tancred Borenius.*

xxix : Bernardo Bellotto (1720-1780).  
Portico with Figures.

*This is a companion piece to the picture by Bellotto, previously reproduced in this series (see No. xxiv), the pair having been painted for Stanislas Auguste, King of Poland, whose Court Painter Bellotto was from 1770 to 1780. Unlike the "Christ and the Money Changers," the present picture is a scene in the accepted Bellotto style: a portico, peopled with figures in the costumes of the artist's time, among whom a Venetian procurator is conspicuous. Through the arcades we look into the courtyard of a palace, the architectural forms of which carry one's thoughts to Venice. A column in the foreground on the right bears a theatrical poster, announcing a French play (*L'Enf... Prod... de M.V...*), and on another poster near by the artist has written, in big letters, as if to emphasize his right to choose any subject he likes, "Pictoribus atque poetis Quidlibet audendi semper fuit aequa potestas." [Private Collection.]*

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Wednesday, August 4th, 1926

## TOWN PLANNING MADE EASY

THE Ministry of Health has just issued an official memorandum for the guidance of local authorities engaged in the preparation of town-planning schemes. The document has been compiled with very great care, and is, presumably, a combined effort of many experts in consultation. The Ministry of Health in constructing the model clauses has acted as the guardian of the public interest in this matter of town planning. The only limitation to its capacity for useful constructive work in this field is one which is determined by the nature of the act of administration itself. Town planning is a highly complex subject, inasmuch as it embraces within its range the whole social content of civic architecture. But while the subject is complex, the administrators are few; and they are apt to be overworked, harassed officials, whose one ambition is to simplify every problem with which they have to deal. The danger is always that if the bureaucrat has placed before him two alternative policies, the one being the best possible policy which can be determined in the light of reason and knowledge, and the other a policy which is most easy to administer, he will be sorely tempted to choose the latter.

Nowadays we cannot do without bureaucrats, and we are apt to rely upon them more and more. We have faith in their efficiency, their impartiality, and their devotion to the public interest, where all practical matters are concerned. In town planning, however, there necessarily enters besides the practical element the æsthetic element, and it is in this respect that architects become a little watchful and apprehensive when the all-powerful bureaucrats are framing regulations which have important architectural consequences. It is not that the bureaucrat is blind to æsthetic considerations, for he uses phrases which imply that he is greatly concerned about what he calls amenities of architecture and town planning. There is one critical test, however, to which he does not appear to submit himself. He does not construct in imagination a picture representing the architectural result of the universal application of his by-laws and regulations in an entirely new city of the future, nor yet has he tried to envisage the degree of damage which might be inflicted upon those cities of the past which are mostly admired for their beauty if the regulations invented by him were applied to these latter also.

Let us glance at the model clauses in order to discover what is their significance for architecture. The provisions dealing with the construction of streets are altogether admirable. Main thoroughfares are differentiated from

subsidiary or estate streets, and all the problems arising out of the reservation of sites for new roads or widenings of existing ones, and the legal aspects of compensation and betterment are dealt with exhaustively. The next section deals with buildings and building lines, with density and character zoning. The prescribed density is to be measured over "land units," the extent of which will be determinable by the local authorities, subject to appeal, though no doubt it will frequently be found convenient to constitute as land units the land included in building plans submitted for the approval of the authority. The density will be calculated in terms of dwelling-houses for single families. An important clause is that which deals with the "plot plan" which developing owners are invited to submit to local authorities. These plot plans, without indicating the exact position of proposed buildings, will show the building plots in which the land affected is to be provided and the number of building units allowed on each plot.

The Ministry of Health advises that averages of twelve, eight, and six building units to the acre should be in common density standards according to the character of the locality. A useful proviso is, however, inserted to the effect that great caution should be exercised in imposing low densities; they must be in the public as well as the owner's interests, and care must be taken to avoid any possible risk of checking the development of the land concerned. The "zoning regulations" are designed to secure a certain degree of flexibility in the determination of the predominant and subsidiary uses of various building areas. Some districts will be what are described as "general zones," that is to say, in these building is practically unrestricted, while in others convenient groupings of buildings devoted to similar purposes may be established. The regulations which most intimately concern architecture are those which will determine the heights of buildings, the maximum number of dwelling-houses to be erected in one continuous block, the compulsory minimum distance between one block and another, the compulsory minimum area of land or garden to be associated with each dwelling-house, and the limitation of outbuildings or projections beyond the main façade of a house. It may be hoped that the restrictions here indicated will not only secure hygienic conditions, but will also make possible the erection of buildings and streets which are in elegant formations and can thus stand comparison with architectural achievements of the past.

## NEWS AND TOPICS

THE Royal Commission on Thames Bridges and the fears for the safety of St. Paul's Cathedral and of Waterloo Bridge, which were the cause of its appointment, have brought the question of the preservation of ancient buildings once more before the profession as a matter of topical interest. From the other side of the Atlantic Mr. Alfred C. Bossom writes to the *Times* to suggest that modern steel-framed structures should be subjected to periodical inspections in order that incipient decay in their members may be discovered in time to prevent its development to danger point. The suggestion is eminently practical, but it implies the unpleasant truth that our modern scientific methods of building construction leave something to be desired in regard to permanence. Must it be admitted that well-designed modern buildings are liable to decay to danger point before the cost of their erection has been recovered in rent? Mr. Bossom makes it clear that the liability to speedy decay cannot be ignored with impunity. The truth is that our modern economical paring down of the materials of construction leads to the erection of buildings which are, in effect, born old. They have never possessed that superabundance of material that would be comparable to the chubbiness of youth, yet their designers fondly imagine them to be substantial in that they are new and up-to-date products of scientific calculation based upon data obtained from careful and repeated experiments.

\* \* \*

It is the incidental and unconsidered forces of wear and tear which destroy buildings, and modern constructional theory does not sufficiently recognize the time element in the action of decay. The instantaneous experiments of breaking loads in the testing press are admirable as far as they go, but they are only occasionally paralleled in practice when a theatre roof falls as the result of an excessive load of snow, or a railway roof as the result of the application of an excessive load of putty and glass carried up to a convenient point for the repairing of the glazing. More attention must be given to the discovery of those processes of failure which occur as the result of corrosion and of the progressive enfeeblement of material which Nature finds a way to introduce in structures originally sound enough to be stable at the time of their erection. The effective repair of old buildings obviously demands study of this character, but it is also necessary as a preliminary to the design and the erection of new buildings which are to remain intact for a period proportionate to their cost. To the study of the statics of buildings momentarily stable according to the theories and the formulæ of the professors must be added the study of the kinetics of buildings as they move through continuous and progressive stages of distortion towards their final fall. When this element has been restored to professional education it will be possible to deal rationally with the decay in a great cathedral or a famous bridge, and also to design new buildings with the assurance that they will remain in sound condition for long periods.

\* \* \*

I learn that the Council of the Royal Society of Arts is about to call a conference of those interested in the preservation of the cottage architecture of this country with a

view to devising specific proposals to prevent the continued demolition of notable examples of folk architecture. This movement has arisen from the recent address on the subject given by Sir Frank Baines, the Director of Works at the Office of Works, in which he urged that not only is a cottage preserved a cottage provided, but that a national effort was needed to prevent the loss of examples of medieval craftsmanship. The Commissioners of H.M. Works and Public Buildings have no power to take over and preserve cottage architecture under the Ancient Monuments Act of 1913, and little is being done to prevent vandalism except by the Society for the Protection of Ancient Buildings and the National Trust. Many examples could be given of ignorant spoliation, such as a cottage at Craven Arms in Salop, a cottage of half timber at Storrington on the South Downs, a seventeenth-century Cotswold type at Box, Wiltshire, and a row of cottages demolished at Stourbridge in Worcestershire to make way for a public library. Under the Government's new Housing Bill already foreshadowed by Mr. Chamberlain, money will be lent for the repair of cottage property. Sir Frank Baines has a wide experience of the matter, and is of opinion that in the majority of old cottages still remaining up and down the country the material comprising the shell is often equal, if not superior, to that employed in modern dwellings, and only in extreme cases is the charge likely to be more than that for entirely new cottages.

\* \* \*

The correspondence which has recently been concluded in the columns of the *Observer* on the subject of town-planning policy has served a most useful purpose inasmuch as that newspaper has made possible the public expression of opinions which are contrary to those commonly held by the apostles of the Garden City Suburb movement. It must be confessed, however, that these latter have used the weapon of controversy with great skill, and have made out a very good case for their panacea of the small satellite town, the function of which is to relieve the congestion of the great cities by attracting to itself the surplus population and a sufficient number of industries for its employment. The argument put in this particular way seems incontrovertible, and at first sight it would appear that only a reactionary and obstructionist of the deepest dye would hinder by word or deed the establishment of satellite towns. Let us examine some of the arguments of the other side. One correspondent maintains that although Letchworth, Welwyn, and Becontree are most laudable efforts to liquidate the population of great cities, unfortunately they cannot hold materially that portion of the community that is always unable to avail itself of the amenities provided by the garden city or suburb. Dock and transport work in which thousands of the unskilled dwellers of the slums are engaged cannot be moved out of the cities. Another correspondent adds his testimony to the effect that it is physically impossible to transport the main army of workers to and from the outskirts of Greater London, and that the slum problem cannot be dealt with on these lines. Manufacturers cling tenaciously to the old business centres. Labour is to be found there in abundance. The attractions of the town are manifest. The cost of travelling long distances is avoided, and where there are several members of a family engaged in factories and workshops, travelling becomes a serious item of expenditure. There is the further question of the midday meal, which is more economically provided in the home, especially where there is a

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large family of workers. From the manufacturers' standpoint, the question of repairs to machinery and the obtaining of spare parts and accessories with the least possible delay are very important.

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There can be no doubt that the big town, provided that it be not too big, is extraordinarily convenient, and the whole of our western civilization has been tending towards it for centuries. Our manner of life is essentially urban, and whatever evils we may suffer from at the moment, it is not likely that we shall eradicate them by trying to make our environment once more rural or even semi-rural. There is such a thing as the town and, again, there is the suburb, and beyond that is the country, a thing which, by the way, only town-dwellers really appreciate. Let us, then, cling to these three things, or, at any rate, to two of them, for some of us would be quite content to keep the town and the country and let the suburb go. The trouble about so many of our housing reformers and "expert" town-planners is that they would deprive us of the town altogether, and give us nothing but suburb. They do, indeed, draw a nice distinction between a garden city and a garden suburb; the distinction, however, is one purely of function, not of character, using this term in the architectural and social sense. The only difference between the garden city and the garden suburb is that one is more self-sufficing than the other, inasmuch as it has attached to it a certain number of industries, but both are alike suburban, for the buildings in them are arranged in a conformation which is definitely associated with the idea of suburbia. A certain looseness and detachment, a certain smallness of conception, a noticeable absence of urbanity are here in evidence. The town is great, the country is great, and both of these have earned for themselves the attachment and the reverence of mankind, but nobody has ever yet written a poem to a suburb, and it is unlikely that anybody will.

\* \* \*

What bearing has this on the *Observer* controversy? Let us concede that many of our cities have grown to unwieldy dimensions. We may further admit that it is desirable to check their growth. It is obviously no solution of the problem to create on the outskirts of our cities more and more dormitory suburbs whose inhabitants spend many hours during the week in travelling to and from their homes, and who impose an almost impossible strain upon all available means of transport in the process. The obvious solution, of course, is the satellite town. We must determine what industries can with greatest advantage be removed from the centres of the great cities and be placed elsewhere where they may become the centres of new townships. It would appear that I have conceded everything to the modern town-planners. What is my quarrel with them, then? It is that some of them are seeking to impose upon us a deception, and that they are using words in wrong senses. They tell us that they want to give us satellite towns, but in reality they are scheming to provide satellite suburbs, or, to put it more precisely, aggregations of buildings characterized by the formal and spiritual attributes of suburbia. Before the policy of the satellite town has the smallest chance of success, the suburban prejudices and proclivities of town-planners must give way to a more enlightened understanding of the nature of urban civilization. The British working man—who sometimes likes to

describe himself as a member of the proletariat, a word which, I believe, means disinherited—has yet a very real part in the heritage of our cities, and provided that his dwelling is decent, that he is not overcrowded in his home, and he earn sufficient to maintain himself and family in conditions of reasonable comfort, he loves the town, not, as some of his critics suppose, on account of the inferior attractions and excitements which a modern town provides, but because the town is the only complete architectural expression of the great human quality of sociability. And the working man, except under compulsion—which as yet our politicians and administrators are not able to exercise—will not migrate in large numbers to any so-called satellite town which does not enable him to express this virtue of sociability. The satellite town must be not suburban, but, in the true sense of the word, *urban*.

\* \* \*

I feel that the General Purposes Committee of the Cornwall County Council needs the sympathy of its friends; for the committee is in that parlous state which an eminent Cornish writer is wont to term "puzzle-headed." Rather badly bitten by the pestiferous economy mosquito, the committee hardly knows what to do about it. A Mr. Bray, the chairman, is reported as saying that "having discovered that they had spent £37,825 in seven years, or an average of £5,403 a year, on architects, he was, and other members were, astounded." Such words as astounded, amazed, thrilled, and so forth, being *clichés* that through overwork have depreciated more than the franc, I am naturally at a loss to assess the net value of Mr. Bray's emotions. He is reported as saying that "as far as he could see"—no illimitable distance, I apprehend—"they were having two architects, one in the east and one in the west." I had almost expected him to complete the jingle familiar to boyhood—"and one to pluck at the crow's nest." As yet no crows have been plucked; but Mr. Bray is on the war-path, together with one Mr. Tripp to re-load his guns; for Mr. Tripp is reported as stating that when he raised the question six months ago, and suggested the appointment of a single architect for the whole county, the chairman—not Mr. Bray, I'll go bail—and Sir Arthur Carkeek "pooh-poohed the matter, and said it was ridiculous to think of such a thing." Seeing that the Delectable Duchy comprises an area of 1,350 square miles, or 863,665 acres, I have much pleasure in saying ditto to the chairman and Sir Arthur.

\* \* \*

According to later advices, the Cornwall General Purposes Committee is now in imminent danger of taking a front seat among the discoverers of mares' nests. Or perhaps they are innocently trying experiments with propagandist methods of "making figures talk." Here is the recipe: To strike an average that is as enormous as abnormal, take a period suitable to the object in view. I extract the following luminous passage from the later of the two reports. "So far as I know at present, the average of the twenty odd years we have been at work has been £322 7s. 6d. per annum in architects' fees." Divide this stupendous sum between two architects, and it is immediately apparent that each must have been amassing wealth at the scandalous rate of £161 3s. 9d. per annum. That is slightly different from the average of £5,000 odd that caused the specialist in averages to be "astounded." I note that a sub-committee has been appointed to ascertain the exact figures.

ASTRAGAL

## THE FATE OF OUR CHURCH SCHOOLS

[ BY SIDNEY HEATH ]

It is becoming recognized that the requirements now set up by the Board of Education with regard to the air-space, heating, lighting, and sanitation of the elementary schools to which they make an annual grant, will, if insisted on, result in the closing down of some hundreds of church schools up and down the country in both busy towns and quiet villages. Those people who have given no special thought to the matter are probably unaware of the fact that the cost of all structural alterations of, and additions to, church schools falls on the managers and not on the local education authority. We must remember that all church or national schools were built entirely by the donations and gifts of church people, aided in some cases by a grant from the National Society (the full title is "The National Society for Promoting the Education of the Poor in the Principles of the Established Church"), and never at any time has one single penny of public or ratepayers' money gone towards their building. The majority of these schools are the property of the managers, who can, generally speaking, dispose of them in any way they please. Others belong to the lords of the manor, who have inherited them with other property. When the county councils took over these buildings in 1902, it was agreed that if the right of appointing the head teacher was vested in the managers (subject to the approval of the Board of Education), no rent should be asked for the schools, and that the cost of all structural alterations and repairs should be borne by the managers. The local education authority is responsible only for internal fittings, desks, books, cupboards, stoves, etc., although they do in some cases pay half the cost of new flooring. Everything else falls on the managers, and until a new Act of Parliament is passed no public money may be spent on the upkeep of the fabric of a church school.

How, then, have the managers in the past been able to keep the schools in repair since 1811, when the National Society was instituted? The only funds available (unless there is a small endowment) are the local donations of church people, and the rent of the teacher's house, should there be one.

Before the war the managers were somehow able to satisfy the Board's inspectors and medical officers, but the cost of labour and material has now risen so high that the greatest diffi-

culty is experienced in raising sufficient funds for really essential repairs, while, at the same time, the Board's demands for improved lighting and air-space become each year more stringent; with the result that, at first sight, many church schools, in both town and country, would appear to be threatened with extinction. All the same, it is extremely doubtful if many church schools will be closed unless their condition is hopelessly bad. Think for a moment what it would mean if the managers of the church schools in a large town decided to sell the buildings, many of the sites of which are of immense value. It would simply mean that the local education authority would be compelled to replace those schools at a cost to-day of some hundreds of thousands of pounds. We may safely assume, then, that the church schools are safe (except for amalgamation, and a re-grouping where they are situated close together), so long as the Board make reasonable demands, and the managers do their best to meet those reasonable demands. The present writer knows of church schools that have been condemned annually since 1882, and they are still in existence.

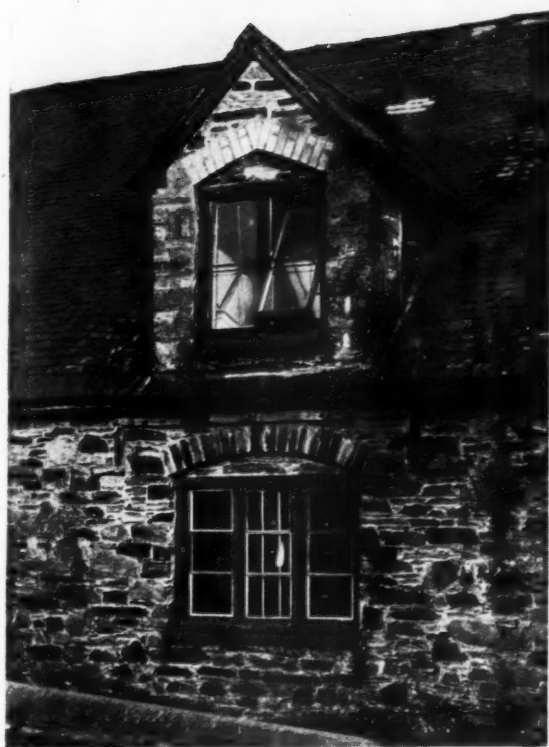
Architecturally, church schools conform generally to an ecclesiastical type of buildings in towns, but in rural districts they may be divided into two broad classes: the "church" type and the "cottage" type, with a preponderance of the former. This style of school bears evidence of always having been designed by a church architect, while the "cottage" type has been put together, probably without any real plan, by a local builder. From a teaching and educational point of view both of these types are highly unsatisfactory, while in some cases the old cottage where the village dame kept school was acquired, and additions made by taking

over the adjoining cottages and knocking down the partition walls. This type of school is fortunately somewhat rare to-day.

The idea of the "church" type was undoubtedly to give an ecclesiastical tone or veneer to a school built by church people for church children, with the result that the architecture of these schools ranges all through the Gothic styles, with Victorian additions, unless they happen to have been built before that very inartistic era. Now, the Gothic style



*This church school was erected by a lord of the manor, whose coat of arms appears on the building. The design is unsuitable for a school. The interior is badly lighted.*



*Left, a cottage type of church school. The main wall is too low, the window too small, the roof too massive, and the dormer window is clumsy. Right, offices incorrectly planned to abut on the main walls. They were first condemned in 1872, and are to be rebuilt in another position.*

can be made very pleasing to the eye, at any rate as regards the exterior of a building, whether a school or a large public building, but those very features that are externally picturesque—mullioned and traceried windows, high-pitched roofs, and heavily-buttressed walls—render many schools quite unsuitable for the purposes for which they were primarily built. In the majority of them all the care and originality of the architect, all the excellent work of the village mason, have gone to form a picturesque exterior, with but little regard for interior requirements. We have only to compare a country church school of sixty years ago with a modern council school to realize at once the difficulties under which both teachers and children of the average village church school have to work to-day. Now, it is true that in towns, and when

used on a large scale, the Gothic style can be made to produce really efficient schools, as witness Barry's fine Perpendicular building of King Edward VI's School at Birmingham, and Jethro Coussins's excellent group of elementary schools (council) in the same city. It is when used on a small scale that an ecclesiastical style of architecture, save perhaps Early Georgian, has failed

to produce good schools, and this mainly because those who built them failed to grasp that the fundamental principle underlying all good architecture is *utility*. Thus we find village schools with all the light shut out by mullioned and leaded windows, where infants and older children are all taught in one small room, with no other division than a black-board screen, and frequently not even that. The present writer knows of at

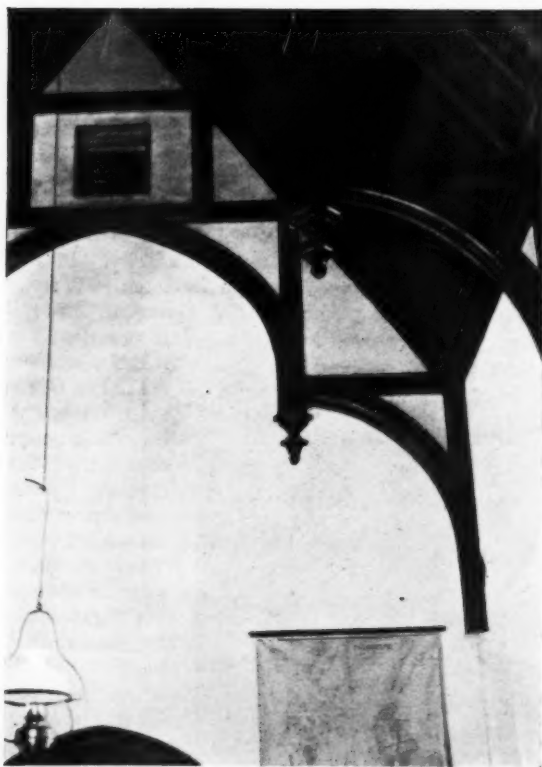


*This church school is to be improved by lowering the windows and fitting them with modern frames. The playground needs a better surface.*



least one such school adorned with an elaborate hammer-beam roof in chestnut, the cost of which must have run into hundreds of pounds, with which money the necessary classroom could have been erected. Then again, these schools, possessing high-pitched roofs, cannot be heated adequately during the winter months, and the massive beams collect an immense amount of dirt and dust. It is true that any children complaining of feeling cold in the days when the school was built were warmed up in a manner that has largely fallen into disuse, but the fact remains that real economy in heating would be effected if ceilings were introduced into the schools that have these great cavernous roofs. Go where one may in rural England one finds the same state of things—an entire lack of forethought for the practical purposes for which the buildings were intended.

For efficient teaching the "cottage" type is even more unsatisfactory than the ecclesiastical, and far more costly to keep in good repair. Whatever its faults in planning, the "church" type of school was nearly always well built as regards foundations, walls, and details; but the "cottage" type has generally serious structural defects. The local mason's experience of building being limited to cottages, he only knew how to put together a school on that pattern, with the result that walls are all askew, with low springing for a high-pitched gabled roof, pierced by dormer windows. The lighting of many such schools was so bad that large skylights have had to be placed in the roofs, resulting in



*Above, a poor church-school interior. The blackboard screen, when placed in position, forms the only division between the infants and the older children. Below, the roof of the same school. The pitch is excessive. The money spent on this roof might have been used to help defray the cost of an infants' classroom.*

that distracting form of illumination known as "cross-lighting."

Of the sanitary arrangements of the average rural church school one cannot speak well, and on this point the Board are amply justified in the reports they have issued. The importance of hygiene, fresh air, and good sanitation was not so well understood fifty years ago as it is to-day, and it is the duty of the managers to see that the conditions under which the children have to work are not detrimental to their bodily well-being. The excellent work done by the School Medical Service, costly though it may be, has saved the lives of hundreds of weaklings who would never have survived the harder conditions existing in the country districts half a century ago.

One of the greatest difficulties before the village schools at the present time is the roving tendency of the agricultural labourer. In past days generation after generation worked for the same farmer or squire, and the numbers in the school kept fairly constant. To-day the farm hand seems too restless to settle anywhere for long. Thus a school with 100 children may dwindle down to sixty in less than a twelvemonth, while a neighbouring school may increase from thirty to eighty in the same time. It is quite the exception to-day to find children who have attended the same school from five to fourteen years of age. It must also be said that the modern teacher is almost as restless as are the parents. We live in an age of unrest, which is reflected in our national architecture, art, and education.

In conclusion, it is obvious that the only way to put the church schools in good condition is for church people to find the necessary money, as they have done in the past. They can do this either by gifts to their own village school or by donations to the Special Diocesan Funds that are being raised for the purpose.



CURRENT  
ARCHITECTURE  
SECTION

## THE GENEVA LABOUR OFFICE

[ BY M. KENNEDY ]

THE new premises of the International Labour Office of the League of Nations, recently opened at Geneva, are chiefly interesting because it is the first "international" building of its kind built since the war (even before the war there were few), and, secondly, because its construction is to be followed by that of other League buildings—an Assembly Hall and an office for the League Secretariat (standing in relation to the I.L.O. very much as does a Ministry of Labour to a Foreign Office). The architect, M. Epitau, won first place in the competition thrown open, in 1922, to architects domiciled in Switzerland, and decided by an international jury; the restriction of domicile was made because the architect had personally to supervise all details of construction.

The problem was to construct an office to suit the administrative organization of a staff of about 350 persons (covering some thirty-four nationalities), together with all their impedimenta—notably a library consisting of some 165,000 volumes, and growing at the rate of about thirty volumes a day, and storage space for all office and stationery supplies, and for large stocks of the many publications produced, distributed, and sold by the I.L.O. The building had, further, to provide one large hall for meetings of the governing body, a series of committee rooms, and a reading-room attached to the library proper. It was further required that the building should be enlargeable, to provide for future years. It had, of course, to be consonant with its position—a magnificent site presented by the Swiss Government on the edge of the lake. (It may be noted here that, despite the proximity of the lake, no difficulties were met with in the building of the foundation.) The sum allowed for the entire work—including heating and lighting equipment, etc.—was 3 million Swiss francs, or less than £120,000. Finally, there was,

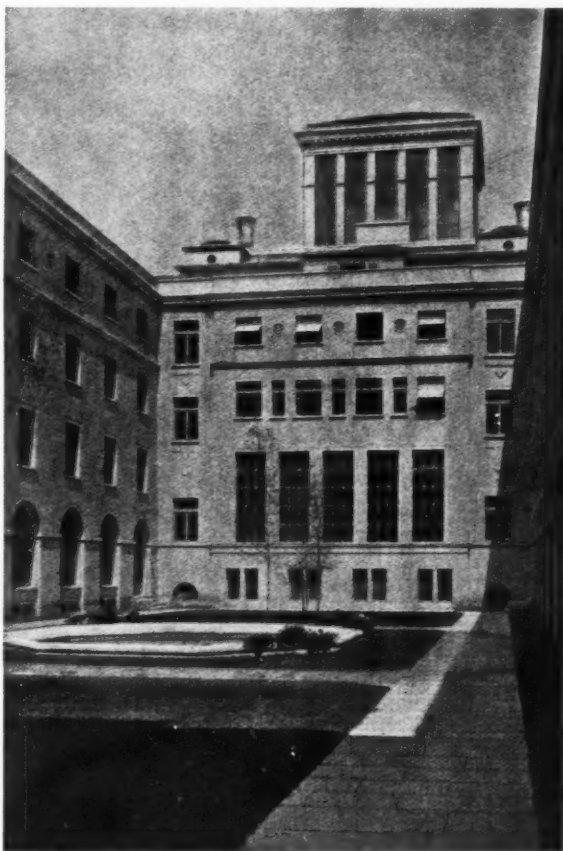
perhaps, the greatest of M. Epitau's difficulties—he had to please the taste of some fifty nationalities!

In remarkably short time (some two-and-a-half years), and without exceeding the financial limit (apart from a comparatively small excess due to an idiosyncrasy of the local authorities in the matter of drainage), M. Epitau constructed a building which seems to meet the practical needs.

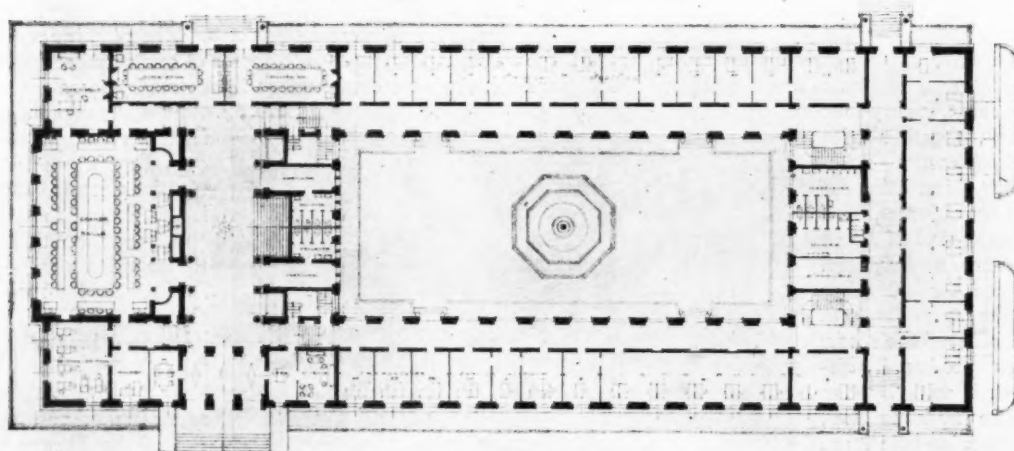
He constructed a large rectangular shell, 86.30 metres long by 33.80 metres wide. As the plan of the ground floor shows, the northern end forms a block containing the main entrance hall and staircase, the Governing Body room (with gallery, and above it the library and reading-room), and committee-rooms. The remainder is a hollow rectangle divided into rooms of one or more "units," and enclosing a courtyard 41.85 metres by 17.00 metres.

The arrangement of the hollow rectangle is repeated on each floor; on all but the top floor access to the offices is by a corridor lit by the courtyard; on the top floor the corridor is on the outside. At each end of, and inside, the rectangle are staircases, lifts, and lavatories. There are virtually four staircases and three lifts (apart from special stairs and lift for the use of the library and contained in it). The smallest office rooms accommodate two persons comfortably (though their depth is, perhaps, disproportionate to their width); there are two windows to each such office-unit. Mention should also be made of the basement—devoted to storage. The office is centrally heated throughout.

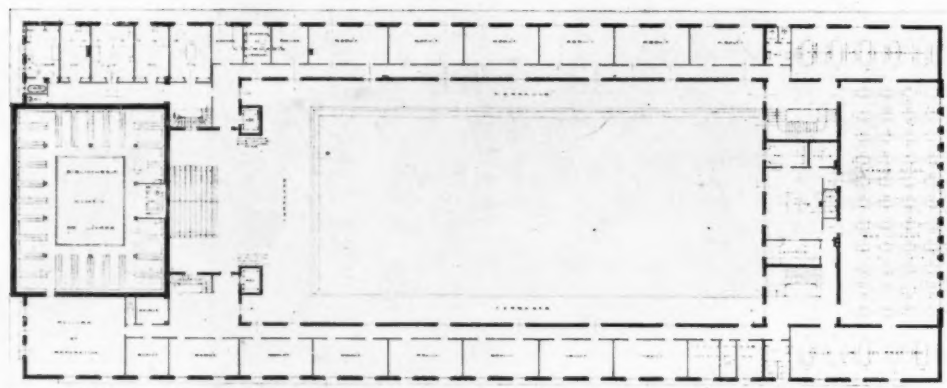
In this rectangle there is little which is not simple; indeed, to a layman it seems to have been a simple task, simply executed. It is satisfactory, but not thrilling. It is true that one or two up-to-date "gadgets" are included—such as a non-stop lift, and the provision of cupboards



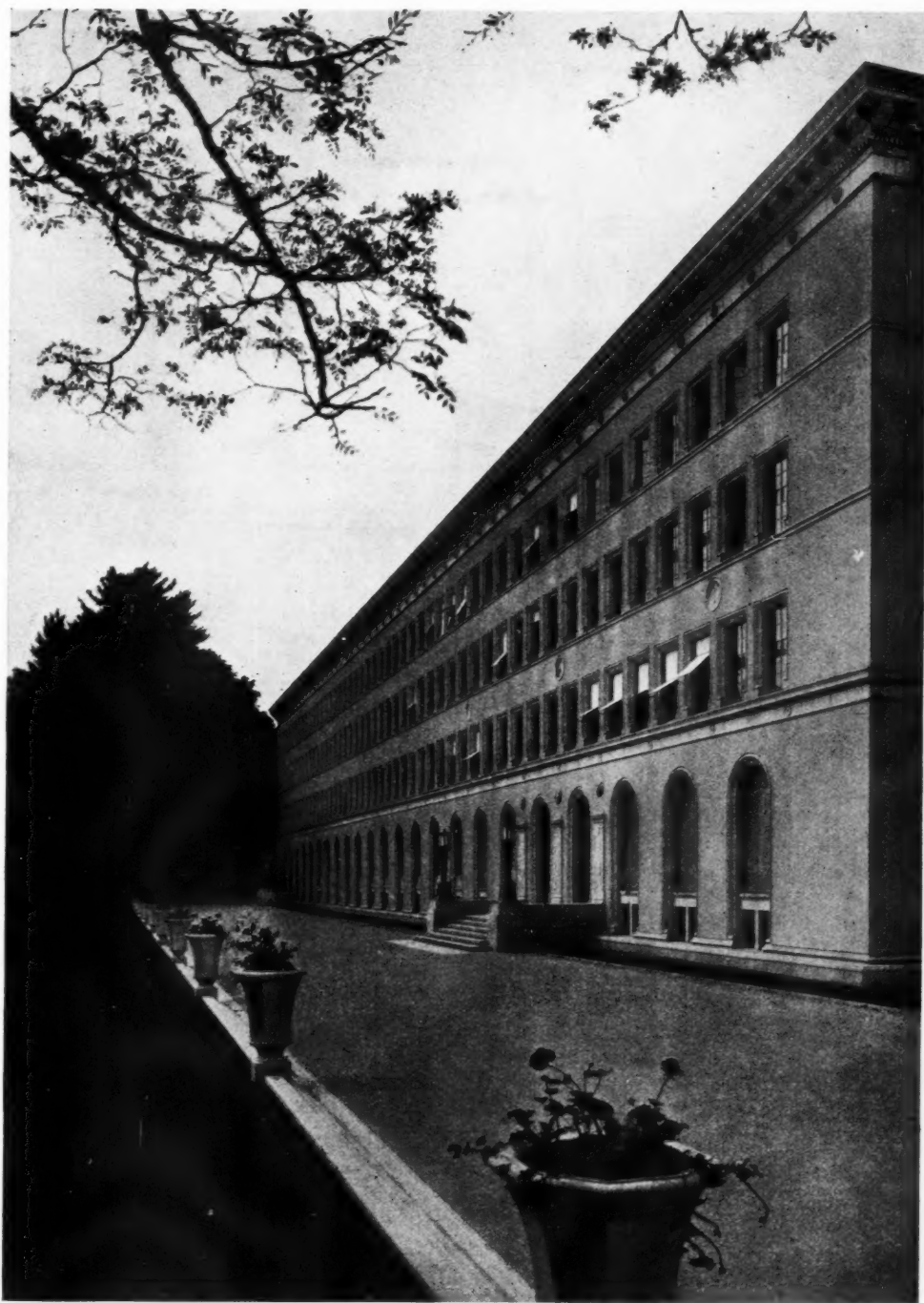
*The International Labour Office at Geneva.  
By George Epitau. The central court.*



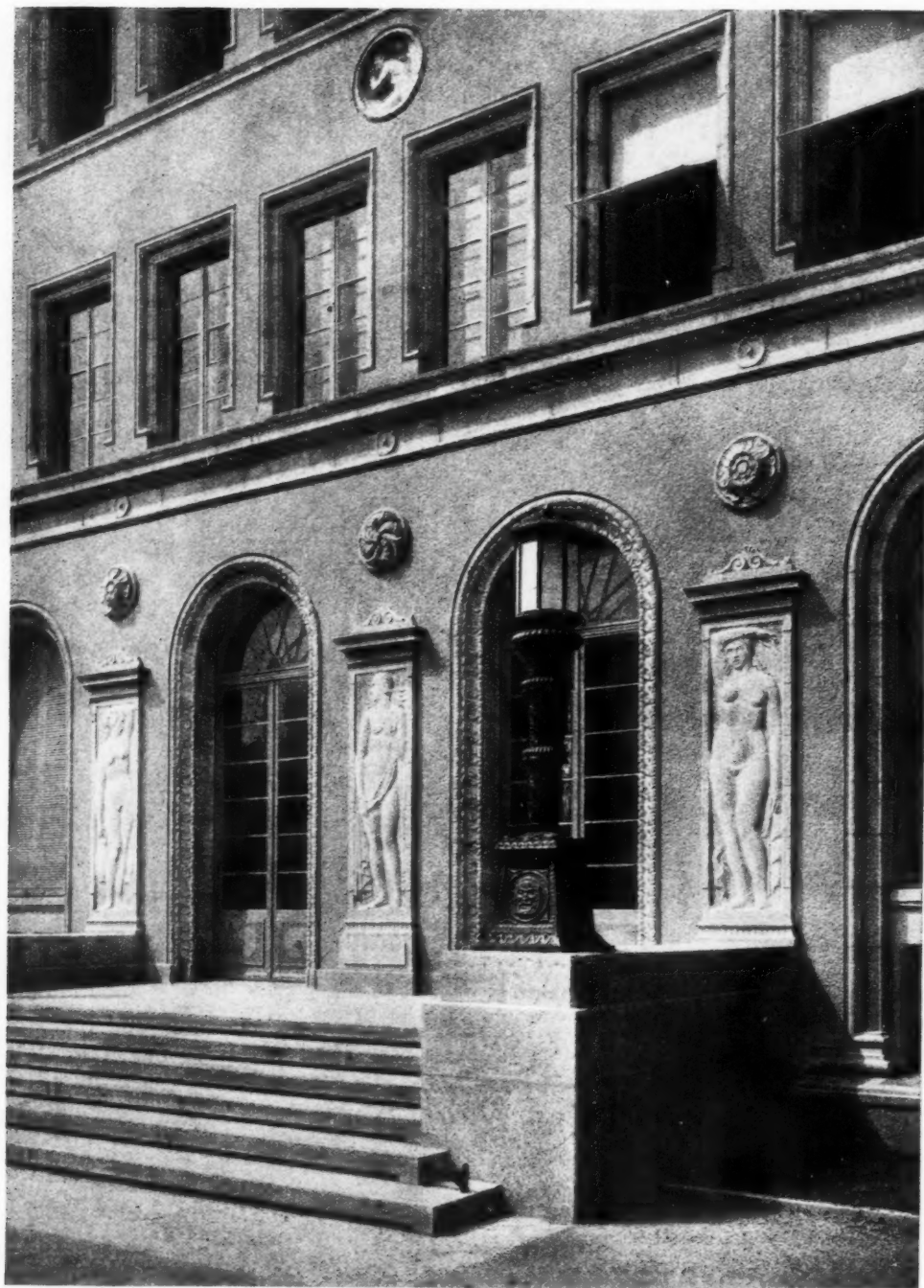
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*The International Labour Office at Geneva. By George Epitoux. Above, the east elevation. Centre, the top-floor plan. Below, the ground-floor plan.*

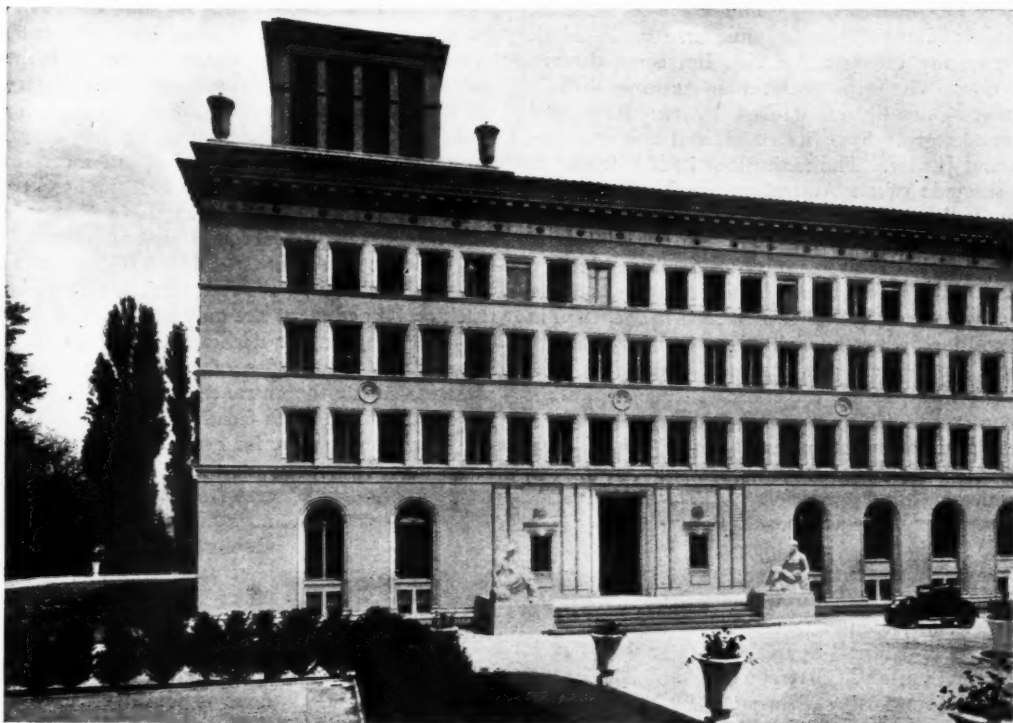


*The International Labour Office at Geneva.  
By George Epitoux. The east elevation.*



*The International Labour Office at Geneva. By  
George Epitoux. A detail of the east elevation.*





in every room for coats and hats—but on the whole there is a disappointing lack of inventiveness. The number of entirely modern government buildings is not great; here was a chance to show how the architect nowadays can help the administrator. But the hollow rectangle, with its long passages (to take one example), will not save messengers' salaries nor help dossiers to travel rapidly. Another small detail of some practical importance is this: all the doors, despite the rooms' comparatively excessive depth, open outwards into the corridor; "Safety First" therefore requires fast-moving travellers to hug the opposite wall! These are but details; still, the presence of some of them, and the absence of others, is a disappointment.

Apart from their decoration, the rooms in the solid north block are equally simple. In their case there was less room for inventiveness: the Governing Body room is of dignified proportions, and is well suited to



*The International Labour Office at Geneva. By George Epitau. Above, the principal entrance. Below, the statue of Peace. By Luc Jaggi.*

its purpose. The library and book store also are successful, the reading-room pleasantly light, the library less so, for the sake of the books.

Had it been "left at that" the whole building would have been extremely simple and not undignified. There would have been little to do but congratulate M. Epitau upon having done so much at so small a cost. I have said nothing of the materials; briefly, the framework is of concrete and reinforced concrete; the basement of granite; the outer walls of the first floor of stone, and the remainder of artificial stone. Doubtless time and weather will add tone to the colour, and let us hope they will not be too severe on the artificial stone.

But M. Epitau was confronted with two other difficulties, one of which, perhaps, he cannot be blamed for failing to surmount. In the first place the various governments and other bodies (thankful, it may be, that the cost of the building

was borne by League "savings," and involved no extra contribution from them) made gifts, mostly in kind. Space prevents my giving a full list, but some deserve special mention. The steps to the main entrance (which is unimpressively small) are flanked by two large and ineffective statues given by Switzerland, and said to represent Peace and Justice. The main door itself is fretful in design: it is made of an Australian wood, of a rather unappetizing yellow colour, and so sleek with varnish that the grain may well be artificial. In the hall a pleasing Finnish picture faces the staircase, at the foot of which, on each side, is a grim bronze figure by Constantine Meunier—the best things in the building, it seemed to me, even in their bad position, with the light directly behind them. Until a promised German gift of stained-glass windows is installed, those who pass up the staircase have a pleasant view of the grass-covered courtyard, in the centre of which will shortly stand the fountain, exhibited by Mr. Gilbert Bayes at the Paris Exhibition, 1925. I am anxious to avoid a catalogue, but I should like just to refer to a number of admirable etchings generously presented by Mr. Frank Brangwyn, and a fine series of lithographs given by Mr. Muirhead Bone. If, then, I merely mention that a "modern" Spanish picture of Pygmalion and Galatea, a set of singularly comfortless Rumanian furniture, and a set of massive Polish pieces, crowned with gold pineapples and eagles, have all had to be given places of honour, and that a fine bronze statue of (I think) Tibur reclines rather disconsolately on the terrace outside, turning his back on the rival Rhone, I shall, perhaps, sufficiently hint at the difficulties which the nations' generosity may have caused.

The best room in the building is the Governing Body room: it is panelled and furnished in Indian wood (much the colour of laurel), worked at the expense of the British Government, and contains also a fine picture by Ferdinand Bol at one end of the room, and a Gobelin tapestry at the other (the gifts of Belgium and France). There is a dais for the chairman, confronted by a semicircle of seats for the other members; if a criticism be called for it is that there seems no real need for the aisles which cut the semicircle into three, and that they serve only to suggest that the governmental delegates divide rather than unite the two groups, employers and workers, who are placed on either side of them. So far, very well; but M. Epitau then dropped the builder to become the decorator. He installed (and I believe himself designed) a number of electric chandeliers which almost spoil the whole effect. I will forbear to describe or discuss them in detail, but they serve to introduce the last difficulty which M. Epitau could not overcome.

I fear the builder was so economical that he had just

a little too much money to spare, and then the decorator got the upper hand. The most noticeable and most unhappy extravagance is the turret which is planted at the northern end, on top of the solid block. Its defenders say it serves a useful purpose by lighting the library, but a flat skylight would have served the purpose better; I do not say I should have preferred it, but I certainly should have preferred a turret roughly half the height. It seems to me that seen end-on it would have harmonized better with the lines of the roof, and that seen from either side the building would have looked less like a steam-engine. It would have made the four terrible "vases" which are stuck on its pediment not only needless but impossible.

Much of the other decoration is equally tiresome—for instance, the flat strips of indecisive reliefs which are plastered about the entrance door, and the figure which projects from the north façade. The medallions above the first floor windows are far better, but the relief is not bold enough to compensate for the effect of height and of concrete.

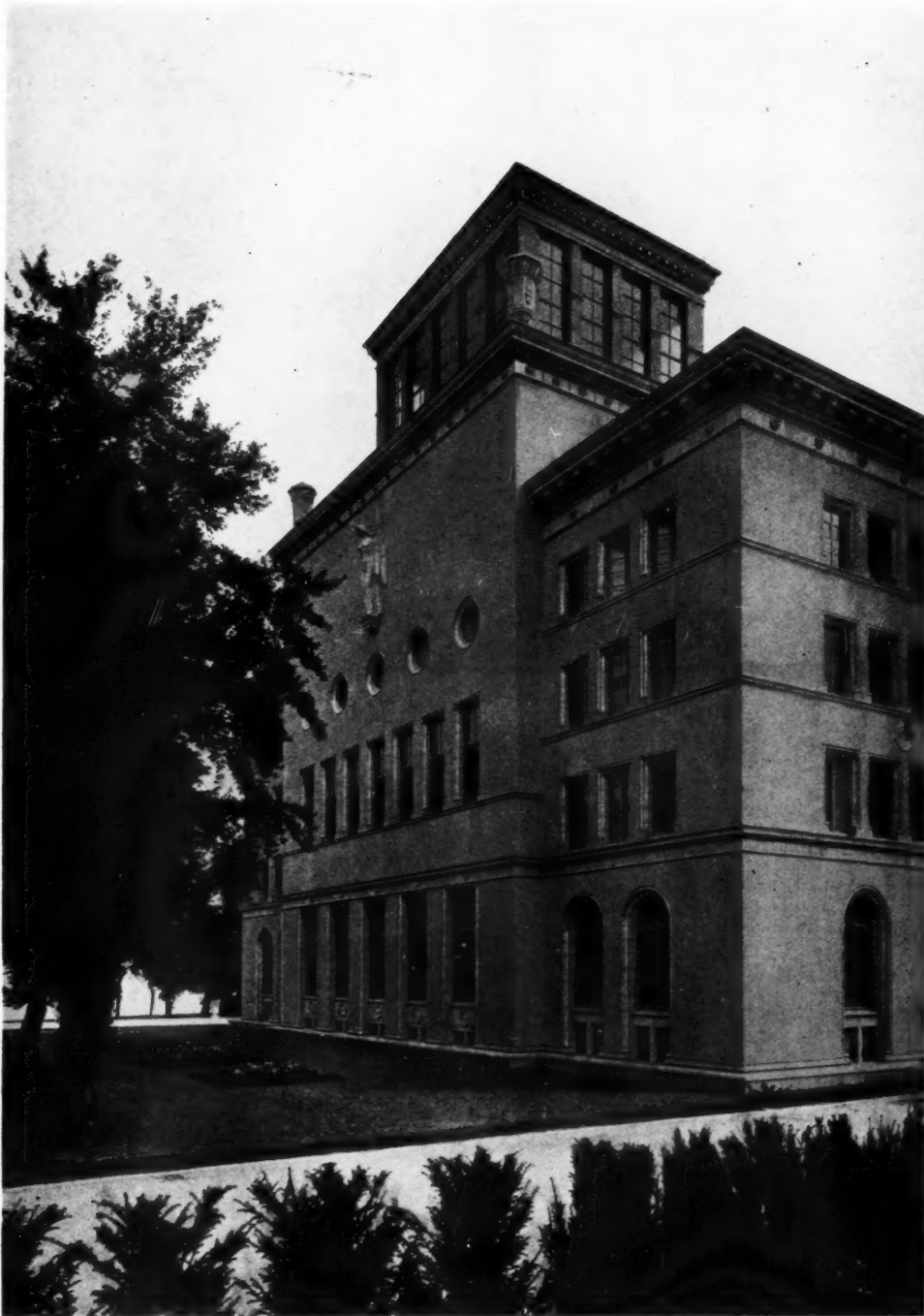
Yet both the turret and the medallions seem to show that the architect realized the need to relieve the human eye from the effort of seeing a line some 300 ft. long as a straight line. I do not think he succeeded; perhaps the only way in which he could have done so would have been to break the line of the façade by a direct vertical shadow, however slight. The close arrangement of windows only adds to the impression of curvature. As regards internal decoration, the fittings are often clumsy, and purely ornamental adjuncts again are unfortunate—for example, the ceiling of the Reading Room, where the reliefs are really mural decorations hung on the ceiling.

The work taken as a whole may be summed up thus: The demarcation between the practical and the ornamental is too distinct; the ornament, partly in consequence, is, on the whole, unfortunate; the "governmental gifts" have much individual merit, but in only a few cases are related to the general effect; the "practical" work has been competently and most economically done, but the apparent desire

of the architect to "let himself go" as a decorator has somewhat marred a unique opportunity to show the possibility of an office being in itself at the same time an assistance to administration and a pleasure to the observer. M. Epitau has built a satisfactory and inoffensive office: he has not done much more than that. He has been most economical of time, money, and material; he has been a little extravagant in decoration. He is a fortunate pioneer, but one who has not quite risen to his opportunity, although it is certainly true that his opportunity was much restricted by financial limitation.



*The International Labour Office at Geneva. By George Epitau. The sculptured figure on the north elevation. By Maurice Sarki.*



*The International Labour Office at Geneva.  
By George Epitoux. The north-west angle.*



*The International Labour Office at Geneva. By George Epitoux.  
Above, the entrance vestibule. Below, the council chamber.*





*The International Labour Office at Geneva. By George Epitoux. A view of a corridor round the central court.*



*The International Labour Office at Geneva. By George Epitoux.  
Above, the interior of a general office. Below, the Director's room.*

## TRIBULATIONS OF EARLY PRACTICE

[BY KARSHISH]

V: THE FIRST COMMISSION

THE first commission usually falls from the stars, but though the event may seem a miracle, it is only the first of a series of similar miracles which sustain architects in practice. Most architects throughout their career feel themselves in the position of Elijah being fed by the ravens out of the blue. No one has a more vivid sense of an inscrutable workaday Providence than has the architect, and there must be few who have not been brought up short in the midst of an active career with the thought of how precarious an affair their practice is, how powerless they are to make their own career, and by what stray and adventitious chances they come to be busy, or are kept idle.

"Why did you appoint Bentham Need your architect?" one who was building himself a house was asked by his friend. He replied, blandly: "I made Need my architect because he kept a chair for me on the Channel boat while I went to buy a bun." We will suppose, therefore, that our adventurer came by his first commission through a chance encounter of this sort which, facetious as it may seem, is, nevertheless, from life, and not a travesty of life. As has been said, social capacity is an enormous asset to a practising architect; in fact, unless he is a man of extraordinary gifts who can push his way into recognition by sheer force of genius, or has family connections of a wealthy or influential kind, it is difficult to imagine how he will come by early commissions, except through that kind of intercourse with his fellowmen which calls for social capacity.

The first commission, which we will imagine to be for a country house of medium size, is usually carried out under conditions that are at once more difficult, and yet easier and pleasanter, than those which later on will support our friend's practice. The owner is aware that his architect is young and inexperienced, and he, therefore, hesitates to accept his views or to follow his advice; he will be likely to put every proposal of his architect to the test of his own judgment, and will be distrustful of everything which he cannot remember to have seen before. This is the best view of the bad side of the case. At its worst it is an obstinate, refractory attitude, which frequently calls for all the firmness, patience, and persuasiveness of an experienced architect to face and overcome. The pleasant side of the picture, however, shows the owner, and particularly the owner's wife, indulgently disposed to an architect who they feel is closely sharing with them the novel experience of building a house; and if our adventurer, by the time the work is finished, has not established mutual esteem and personal friendship, it will certainly be his own fault and a mark of failure. The intimacy of the relations of the architect to those who employ him will be spoken of later; what we are now concerned with is the position of affairs at the time the first instructions are given for the first commission.

It must be understood that the owner has not been bemused into choosing his architect by any courtliness in the matter of a bun. He probably likes him as a man, and may be interested in his career; but it is likely that in the back of his mind he feels that here is a young man who will do what he wants, and who yet will identify himself, heart and mind, with his employer's interests. It is likely that the client has seen houses of friends which are far from what he would build for himself, and he has perhaps got an idea that architects are refractory people—kittle-cattle, as the saying is. He is also aware that houses frequently cost more than the architect's estimate, and more, also, than the contracted price. He has heard the ominous word "extras." He thinks he knows exactly the house he wants, and he knows what the house he wants ought to cost: he has made up his mind exactly what he will have and what he will pay for it. He would like

to manage without an architect if he could see his way to do it, but as he cannot, it is his wish to relieve himself of the burden of an architect so far as possible, and avoid being obstructed and dragooned as he fancies to be in the way of those fellows. The idea of having as his architect a young man whom he can take under his wing and direct and supervise, attracts him. It need not be said that this will bear rather heavily on our architect; it constitutes one of the difficult circumstances attending early commissions, but there is no harm in this. On the contrary, a good, stiff client, with an understanding of business matters, who will be frequently about the works and question everything, and want to know reasons, and who will inquire distrustfully into details, and raise hares at every turn, may not be the kind of employer best loved by the established architect, but he will give our adventurer a thorough gruelling, compel him to have sound practical reasons for everything he does, and to give a lively attention to inconsiderable trifles, minutiae of organization, and forms of procedure, which will guard him from oversights and omissions, and reveal to him at once the high degree of conscientiousness and thoroughness required of the practising architect (which he might otherwise only learn by disastrous mistakes) and force him to that state of nervous activity in which architectural achievement alone is attained.

It is by such a client, then, that we suppose our architect to be first employed. The worst kind of employer as a first client would be exactly that easygoing, confiding, matter-of-fact, inexperienced friend or relative—if such quite exists—which the experienced practitioner prays for. This formidable first client, then, knowing, as has been said, exactly the sort of house he wants, and the price he will have to pay for it, at once instructs his architect in those two vital matters; and we will suppose that, in order to make things perfectly clear to his young friend, he goes to the considerable trouble of presenting him with an actual plan of the house he wants, prepared by his own dotting hand. This plan will, perhaps, give the exact figured dimensions of the important rooms without allowing for thicknesses of walls, and without any too close observance of the scale of related parts. The client points out to his architect that the kitchen window is placed on the left of the range, but does not point out that there is no possibility of getting any light to the stairs. The arrangement of the upper floors, being of minor importance, is not represented in any plan, but is sufficiently covered by a note describing the accommodation wanted; and the client leaves his architect an absolutely free hand as to the sections. The elevations, having no connection with the plan, but being merely the effect the architect gives to the outside of the house, are a matter to be afterwards decided. As the aspect of the house is not indicated, and the architect has not seen the site, there is nothing to interfere with his immediately proceeding to complete the design except two things: first, that the plan will not work; and, secondly, that if such a house were, in any possible way, buildable, neither the client nor anyone else would consent to live in it if another of any kind were to be had.

All this is an easy matter for laughter; but if our architect knew what experience will in due course teach him, the receipt of this plan would make his heart sink. By it he would be informed, first, that the owner's mind is filled with an actual image of his intended house so that it will be a very difficult matter for anyone to persuade him that the ill-considered scheme on which his affection is set is impracticable; secondly, that the client's idea is based on memories of some other house, so that he has adapted himself to someone else's requirements instead of clearly visualizing his own; and, thirdly, that his pre-occupation with the plan will prevent him from making his architect acquainted with his needs, for he has limited those needs by the measure of his capacity to figure them in the plan; he has banished some of his desires from his mind because he cannot fit them in. By this plan-making enterprise the client not only assumes to perform incompetently the chief service he is employing his architect to do for him, but is confusing and prejudicing his own mind so that he scarcely knows what he really wants, and at the same time barricading himself against suggestions.



The misfortune of the preparation of a plan by the owner is not merely the increased difficulty the architect will have in envisaging a house which will identify itself with the owner. The architect himself, having once got into his head the idea shadowed forth in his client's plan, will have the greatest difficulty in ever getting it out again. Instead of gathering into his mind the whole of the facts, needs, and circumstances bearing on the problem, and sitting down to devise a comprehensive solution, he finds himself haunted by the idea his client has put into his head, and struggling to fashion some variant of it which will dispose of the radical inconveniences and ungainlinesses it presents. Anyone who has not been through this torturing experience will be slow to realize the hopeless drudgery, the sense of frustration, the irritation, the deadening sense of incompetence which accompanies the effort to arrive at a satisfactory design in this way; nor will he readily understand how difficult it is for the architect by any effort of will to completely disengage his mind from this first suggestion planted in it, and engage afresh upon a scheme of his own. The reason for his difficulty rests probably in this—that the client's diagram has been offered and accepted by him as an instruction; that the client's instructions must necessarily be the governing motive of the design, and that, subconsciously, the arrangement provisioned in the plan becomes identified in the architect's mind with those instructions.

Let our architect then be forewarned, and let him vigorously set himself to elude an obsession which, besides involving him in great distress of mind, will be likely to enchain his fancy and prevent him from doing justice either to himself or the occasion. When his client presents him with such a plan there is only one thing to be done. He must refuse to look at it; he must at once turn it down and put it aside. But how, it will be asked, is he to explain his action to his client? This is not altogether a difficult matter. Michael Angelo was in a more awkward situation when he had to establish himself on similar ground with the Pope. Our architect's strong position is this, that his action is not directed in his own interests, but in the interests of his client. It is not advisable for him to try and describe the technical difficulties governing architectural design, much less the conditions reacting on the artist's afflatus; the client would very properly put him down as an incorrigible prig if he tried to do anything of the sort. On the other hand, it is quite easy to say, in acknowledging the receipt of the plan, that you propose, when you have got full particulars and thoroughly understand the requirements of the case, to make an independent plan with the idea that when it is finished the two plans can be compared and the good points in each adopted. By the time you have arrived at a complete understanding of the problem, mastered the conditions imposed by the site, and familiarized yourself with the needs and aspirations of your client, and have, besides, thoroughly tested various alternatives before committing yourself to a plan, you may turn to your client's diagram, not merely with interest, but with profit. You will understand thoroughly its worth, or worthlessness, and will have so completely mastered the problem presented that you will have no anxiety as to the ultimate issue. When your client sees your workmanlike sketches, embodying a thousand forethoughts and conveniences which never entered his head, and perceives, as he soon will, that you have identified yourself with his aspirations, and enriched them with a varied fancy in many directions; and when, in particular, he sees his own nebulous conception completed and enforced in elevations which present to his mind a realization of the actual building in bricks and mortar, it will be strange, indeed, if he is not vastly more pleased with your interpretation of his ambitions than he was with his own attempts to portray them.

Our architect may now be supposed to have obtained his client's acceptance of his sketch design. The presentation and acceptance of sketch designs does not usually put any severe strain on the mutual good understanding of the parties. One reason for this is that the client feels that his architect is still on probation, and, perhaps, the architect is also aware of this; the former is not committed to anything; the latter has not attained to those God-given powers conferred upon him by the Conditions of Contract.

These circumstances make the client indulgent and the architect pliable. Until the architect has been directed to prepare contract drawings he has no authority or discretion except such as his client may allow him. The consideration of the sketch designs creates, too, an atmosphere of enthusiasm which is even a little hysterical; and if the client is hard to please and likes to examine possibilities and investigate alternatives, and is satisfied only with several sets of sketches, it is all to the good; for when his mind is at last made up he may be considered to have exhausted a number of awkward questions which, if they had been brought forward after the building was begun, or even after the contract drawings were completed, might become serious obstacles to a successful issue, or even the occasion for dissatisfaction with an architect who had failed to bring under his attention considerations of leading importance. The more minutely possibilities are tested and alternatives investigated at this stage the better: when a client is apt to take things for granted after the plan is in the main agreed, and is willing to leave things to the architect, it is specially necessary for the architect to be warned to place under his notice all details of the arrangements. The reasons for this, and the consequences attendant on neglect, will be displayed later on when our architect sets about preparing contract drawings.

We have now to give attention to an issue which is linked up with the sketch designs, and which, arising at this early and tentative stage in the proceedings, is yet likely to prove more ticklish to handle and critical of results than any other single question which will arise during the whole course of the operation. The little matter known as the architect's Preliminary Estimate is, as all architects know—although they do not obtain that knowledge from books—burdened with anxieties; and nothing less than a complete number in this series will serve to do justice to its importance.

[To be continued]

## GOVERNMENT'S HOUSING PROPOSALS

The Minister of Health (the Right Hon. Neville Chamberlain) and the Secretary of State for Scotland (Sir John Gilmour) received last week a deputation from the National Housing and Town Planning Council, introduced by Mr. F. M. Elgood, the chairman, who drew the Ministers' attention to resolutions which had been passed by ten conferences of local authorities in various parts of the country.

Mr. Chamberlain, in reply, said that more houses were being built now than were necessary to provide for the normal annual growth of population, and arrears were, consequently, being overtaken. With regard to slum clearance, he agreed that little progress had been made, although it was a fact that more had been done since the war than between 1890 and the end of the war. The delay in meeting the problem was natural, as the industry had been concentrated on the provision of new houses. He was not satisfied with the present position, however, and anticipated making further proposals at a later date. It was not true to say that standards were being lowered. Baths were provided in all new houses, and the vast majority of houses were being built with three bedrooms. But it was reasonable that a small number of houses should be built with less accommodation, to provide for old couples and others without families. Also, local authorities were beginning to find that tenants could not now readily be found for the more expensive type of house generally built hitherto, and were urging him to allow the erection of a proportion of smaller houses, which could be let at lower rents. He hoped soon to introduce a bill providing for the repair of existing houses which would provide improved accommodation for rural workers at very low rents. Further legislation, he agreed, would be necessary in connection with town planning, and this was included in the programme, which he hoped to carry through before going out of office. Subsidy he could only discuss with the associations of local authorities, but he was the last person to want a break in continuity, and he hoped to make a statement before the holidays as to the intentions of the Government.



## EASEMENTS OF LIGHT

## MODERN METHODS OF COMPUTING COMPENSATION

[ BY JOHN SWARBRICK ]

THE recent action of the Council of the Royal Institute of British Architects in approving of the outline of a proposed Bill (a) to amend the law relating to right of light by providing for the arbitration of claims, and (b) to limit the acquirement of the easements, is again directing attention to the operation of the Prescription Act and to modern practice in such matters generally.

It is now generally known that an almost entire revolution has taken place in the methods of assessing damage in respect of loss of light. Up to a short time before the war, it was customary for expert professional witnesses to submit to the courts, on behalf of both the plaintiffs and defendants, diagrams showing the angles of unobstructed sill light obtainable both before and after the erection of a new building. The inferences to be drawn were then usually stated by the expert witnesses of the plaintiff to be of a most serious nature, so serious in some cases as to be incapable of adequate compensation, an injunction to restrain being the only remedy. On behalf of the defendants, other expert witnesses would subsequently be called and state that the deprivation of light would not be of anything like so substantial a nature as had been alleged; and that in their judgment, in view of the decision of the House of Lords, in the case of *Colls v. Home and Colonial Stores*, the main question to be considered was not how much light had been taken away, but how much remained. Such witnesses would probably conclude their evidence by stating that the infringement was immaterial and that it would be oppressive

to grant an injunction. The court must have realized that although in each case the views were the considered judgments of men of integrity, technical evidence of this diametrically contradictory character on questions of fact was neither very creditable to the knowledge of experts upon daylight illumination nor of any real assistance.

This was no doubt the view of the former Vice-Chancellor of a provincial Chancery Court, when he adjourned a certain well remembered right of light case in which the technical evidence had been contradictory. During the interval, his Honour personally visited the premises of the plaintiff unexpectedly, rapidly made his own observations and formed conclusions, which he duly stated in pronouncing judgment.

The judge simply found it necessary to reject such unscientific evidence and to form his own conclusions, as a mere layman would. Such a test as he made was, of course, only possible in cases in which the building had actually been erected. It could not have been tried in the case of an application for an injunction to restrain the proprietor of a building in course of erection. A particularly dangerous point in such a casual test arises from the fact that the eye is not a reliable photometer. It adjusts itself quickly and unconsciously to changed conditions, and the sky brightness may change very considerably without the eye being able to form a reliable estimate of the extent of the variation. If, for example, a capable observer should view premises during

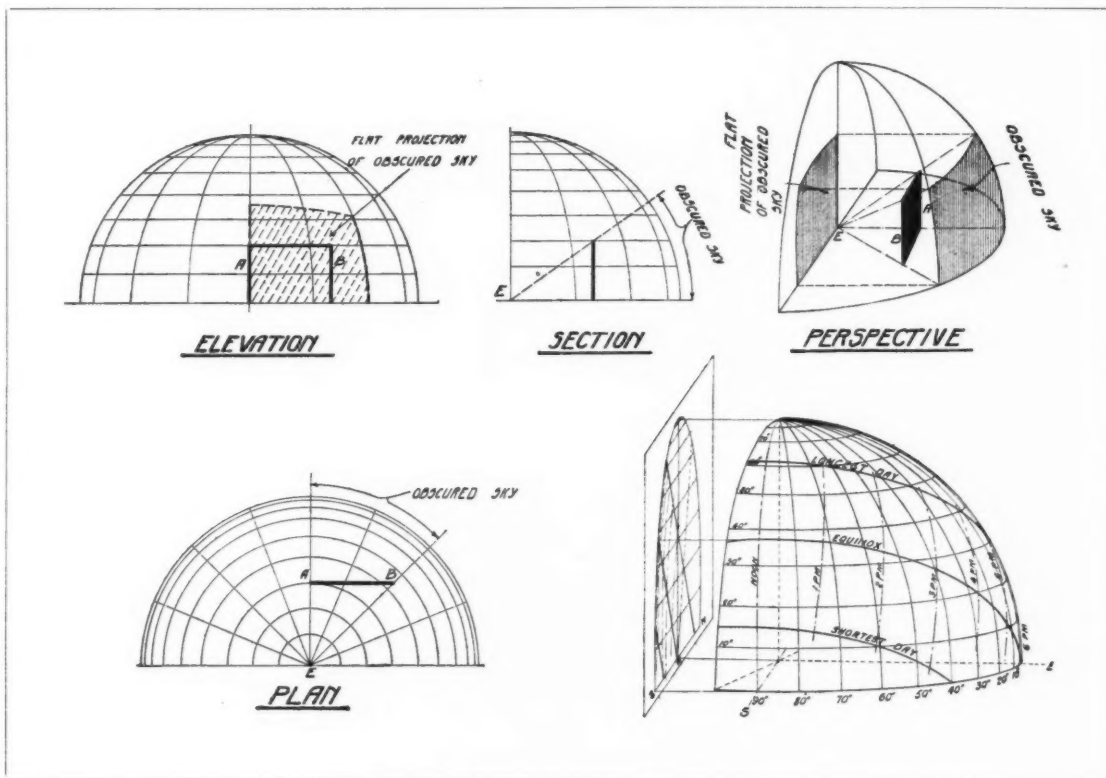


Figure one. The principles of sky projection.  
[Reproduced by courtesy of the R.I.B.A.]

the bright midday lunch hour he might form a completely erroneous idea of the extent to which the interior of the building, as a whole, had been injured during periods when the illumination from natural sources was more normal.

Whilst it is now generally known by legal and other practitioners that modern scientific methods dealing with such cases have been developed and are largely used, comparatively few seem to know definitely the precise nature of the methods adopted. Some even have been known to state that the new methods seem to them to be too theoretical to have any practical value, whilst admitting that they sound very convincing and appear to be appreciated in the courts. But those who will take the trouble to investigate the matter will find that the procedure now adopted is neither purely theoretical nor at all difficult to understand. The methods in reality have been devised for the purpose of presenting obvious facts in a convenient form to enable the courts quickly to visualize the circumstances of any case and to arrive at fair and impartial judgments. They are neither unintelligible, misleading, nor without real practical utility. It will doubtless be generally agreed before long that no other kind of evidence will ever again have any real value, and those who rely upon presenting their cases in the old-fashioned way will in the future probably suffer a profound disillusionment.

Both the Royal Institute of British Architects and the Surveyors' Institution have published communications showing how hemispherical projections of the sky may be prepared for any aspect to show not only the apparent paths of the sun during different months in the year, but also the extent to which existing and proposed buildings either do or would obstruct the available illuminating area of the sky. See figure one. Moreover, there is evidence to show that private practitioners have for some time been using sky projections of this kind. It appears, for example, that Mr. James Dod, a former surveyor to the Liverpool Exchange Company, evolved about thirty years ago a somewhat similar method for determining accurately by means of carefully prepared diagrams the true value of any light which might be obstructed. These diagrams were used by him in several right of light cases. They were, it is stated, used to show the effect of the proposal to roll back the Liverpool Town Hall, in the manner suggested by certain Americans. A similar method is described in Molesworth's *Obstruction to Light*. Apparently neither Mr. Dod nor Mr. Molesworth appreciated the true principles upon which different parts of the sky differ in utility, nor did they use diagrams properly adjusted to compensate for such differences. So far as is known the first diagrams thus accurately corrected were devised by Mr. Percy J. Waldram, F.S.I., who adopted them in 1922, and the first occasion when they were used in a reported case was in the greatly misunderstood case of *Semon v. Bradford Corporation*, to which subsequent reference will be made.

To Mr. Waldram we are indebted for much, if not all, of the exploratory work which has made modern methods of procedure possible, and I feel that it has been a privilege to have been able to confer with him regarding these methods in connection with certain right of light cases. The results of Mr. Waldram's research have, I understand, been tested, approved and adopted at the National Physical Laboratory, and he is universally recognized as one of our highest authorities on daylight illumination. Although many practitioners have regarded the new methods with distrust and suspicion, they are now being

much more widely adopted than is generally known. A well-known Liverpool surveyor recently told me that, on behalf of the freeholders in two of the streets facing the new Holt Line building, daylight plans with the exact percentages of skylight plotted upon them were prepared and agreed by both parties before a brick was laid. Moreover, I was informed that compensation was agreed and paid upon the basis of these plans. It will, therefore, be clear that it is possible to predetermine the effect of proposed buildings on the lighting of particular floor areas so exactly that compensation for injury can be definitely assessed. A settlement of such disputes, on an exact scientific basis, is far more businesslike, and is much more in public interest than the former method of trusting to the opinion of experts without any exact data. Light cases, owing to conflict of evidence of men too prominent to be ignored, were hitherto very costly and the results were largely problematic. In the old days the evidence submitted to the court generally consisted for the most part of the usual plans, elevations, and sections often showing widely differing angles of light according to the points at which they were taken. With such imperfect data the witnesses expressed views that were mainly matters of opinion. When the facts can be presented in a precise and simple form about which no two opinions can be held, cases are frequently settled between counsel as soon as the issues are defined. Still more frequently cases do not find their way into court at all. The two main advantages of the new methods may, therefore, be said to be (a) that the results are exact and incontrovertible, and (b) that they are capable of definite predetermination. The material placed before the court usually consists of daylight plans of each interior affected upon which are drawn shaded isoluminous contour lines showing the disposition of good, adequate, and inadequate light, under dull, but not abnormally dull, weather conditions, both under the original conditions of obstruction, and under the conditions of obstruction proposed. Typical daylight plans are shown in figure two.

In cases involving loss of direct sunlight projections are made of the hemisphere of sky opposite to typical windows upon which are traced the apparent paths of the sun for the different months of the year, the position on each path occupied by the sun at any given hour of the day being suitably marked. Upon this hemisphere of sky are projected all original and all new obstructions, so that the projection may indicate at once the periods over which the window in question will be deprived of direct sunlight. The apparent solar paths naturally vary with the latitude of the building under consideration, and this variation is so

considerable that a sun diagram for a certain aspect in London would not be correct for the same aspect in Manchester. Figure three shows a typical sky projection, with the apparent solar paths indicated.

**Photometers.**—In order clearly to understand the procedure necessary, it would be advisable to consider first how the results might be ascertained with photometers in the case of existing buildings. Naturally, the effect of a building that does not exist and is merely proposed cannot be predetermined by photometric readings taken beforehand. That is an entirely different process that will be described later. Amongst the best-known photometers used for such purposes are probably the Holophane "Lumeter," the "Foot-Candle Meter" of the British Thomson-Houston Company, and the "Luxometer" made by Messrs.

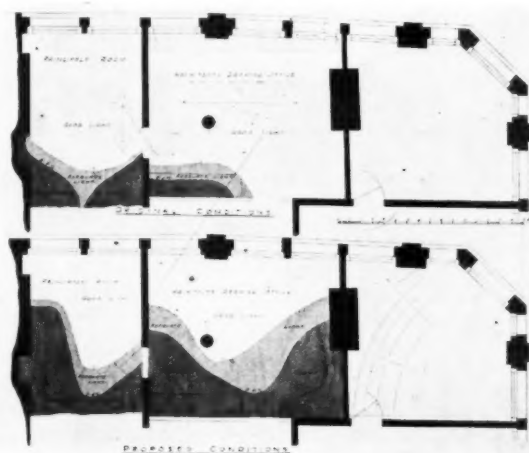
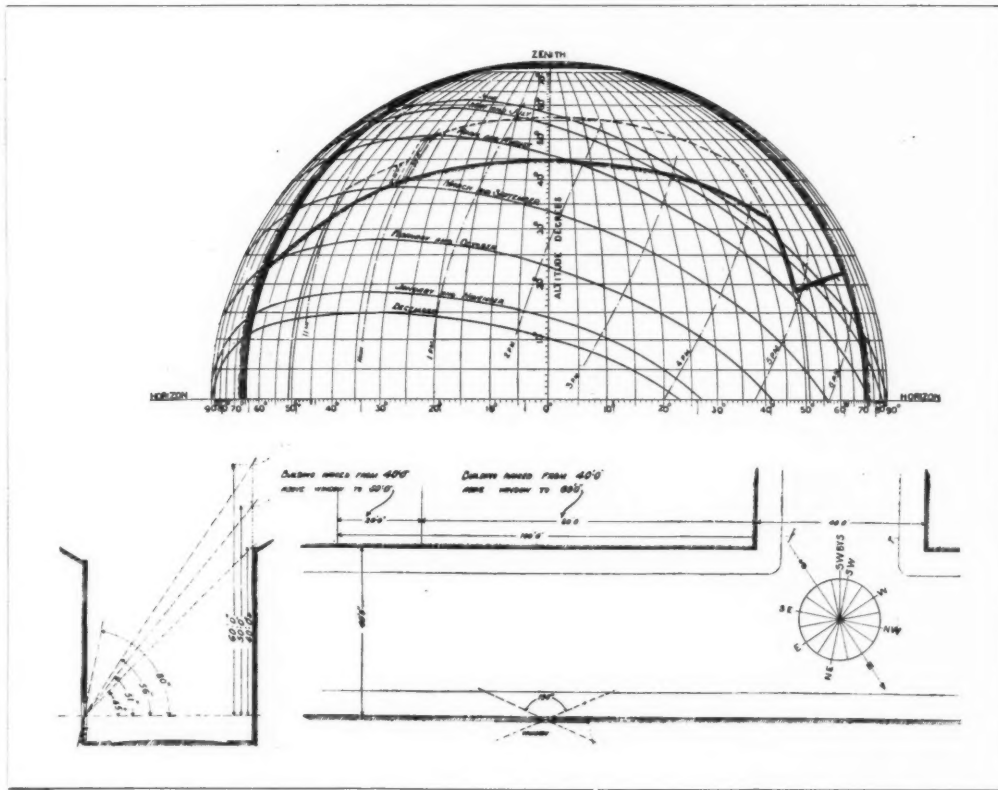


Figure two. Typical daylight plans, showing original and proposed conditions. [These are copied from plans which were used by Mr. Waldram in a Right of Light case in court.]



Everett Edgecumbe. Those who are specially interested in photometry should consult *Principles of Lighting and Photometry* (Messrs. Methuen & Co., Ltd.), by J. W. T. Walsh, M.A., M.Sc., and *Illumination: Its Distribution and Measurement* (Messrs. Macmillan & Company), by Mr. Alexander P. Trotter, late electrical adviser to the Board of Trade, past-president of the Illuminating Engineering Society. In the latter work particulars will be found regarding all the recognized photometric apparatus then in use in this country, and other matters of special interest to physicists and others.

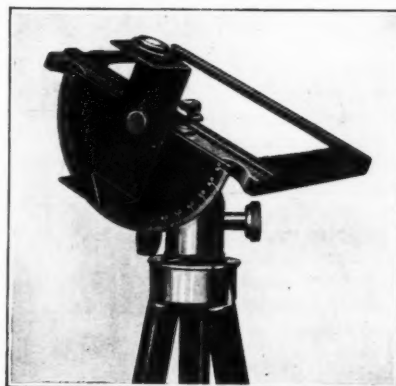
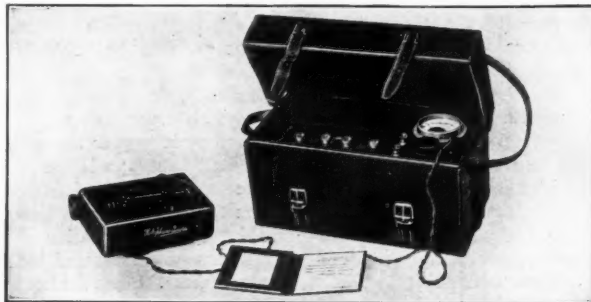
Probably few photometers are now so generally used for measurements of daylight as the Holophane "Lumeter." It is a portable instrument manufactured by Messrs. Holophane, Ltd., of Elverton Street, Vincent Square, Westminster, S.W.1. The complete equipment is illustrated in figure four, and, as it will be seen, it can be stored compactly in a small leather case. The small instrument lying outside the box is the "Lumeter" proper, beside it is the standard matt white celluloid screen or card, on which the readings are usually taken. This is protected in a light metal case, which can, if desired, be fixed in the test surface holder, illustrated in figure five and described later. With the box is a non-spillable accumulator, with a voltmeter and variable resistance, to enable the lamp in the instrument to be run at exactly the voltage

for which the instrument is calibrated. The voltage is indicated by a red arrow marked on the scale. The entire equipment occupies about as much space as an ordinary half-plate camera, and it can be carried about quite easily. The "Lumeter" itself is of a light metal alloy, covered with vulcanite, and is quite light to handle.

The internal mechanism is illustrated in figure six. It will be observed that the underlying principle of the action of the "Lumeter" is that the observer is able to compare the brightness of a matt white standard surface, placed in any position and seen through the eye-piece, with that of a photometric screen inside the instrument (illuminated by a standard lamp, also contained in the latter), which appears to surround the

image of the distant surface. When using the instrument the distance from the test surface to the "Lumeter" does not affect the accuracy or reading of it. The chamber containing the comparison lamp B is cylindrical. G is a rectangular aperture covered by a diffusing screen illuminated

Above, figure three. Typical sky projection, with the apparent solar paths indicated. Aspect S.W. by S. [Reproduced by courtesy of the R.I.B.A.] Centre, figure four. The Holophane "Lumeter." Below, figure five. The Holophane test surface holder. [The two bottom illustrations are reproduced by courtesy of Messrs. Holophane, Ltd.]





uniformly by the lamp inside. This in turn acts as a source of light and illuminates the photometric screen C. The lid A, with pointer H attached, forms the top of a cylinder in which is cut an aperture of special shape. The cylinder fits concentrically round the lamp chamber and rotates as the pointer H moves over the scale K.

The "Lumeter" is now arranged to permit of direct scale readings from 0 to 4 foot-candles, and by the introduction of dark glasses illumination readings up to 4,000 foot-candles can be obtained. With the aperture fully open, the pointer rests at the end of the scale and reads 4 foot-candles. But as the pointer is moved from the position, the outer cylinder rotates and the exposed portion of the diffusing screen is uniformly reduced to one-half of the original area, when the pointer is one-third the way along the scale. The reading at this point is, therefore, 2 foot-candles. By moving the pointer forward another third, this area is further uniformly reduced by nine-tenths, making the reading then one-tenth of the previous one, or 0.2 foot-candles. By moving the pointer over the remainder of the scale the area and readings are together uniformly reduced down to zero.

The "Lumeter" is connected up to the voltmeter panel by the quadruple flexible leads and four pin plugs. The knob controlling the rheostat under the voltmeter is then turned until the voltmeter needle comes on to the arrow marked on the scale. The standard lamp is then operating at the correct voltage for which the instrument was calibrated. The voltmeter should be watched at intervals throughout the test and the resistance cut out gradually as necessary to correct for slight reductions in voltage of the battery as the latter is discharged.

To measure the illumination in foot-candles the standard test surface should be placed in a position where the illumination is to be tested. The observer then holds the instrument to his eye and looks through the eye-piece E at the test surface. He then sees the surface to be tested through the central aperture D in the internal photometric surface C. The pointer H is then adjusted until there is an equality of brightness between the two screens, when the intensity of the illumination is indicated by the pointer on the scale K. To accommodate readings above the direct scale, there are also (at M) two neutral filters, with absorptions of 90 per cent. and 99 per cent. respectively, which can be placed in the path of the rays from the test plate or other object studied by pulling out the knobs at N. By introducing one, both, or all three of these glasses the scale of the reading can be multiplied by 10, 100, or 1,000, so that it is possible to read up to 4,000 foot-candles.

Observers find a difficulty in making daylight measurements owing to the difference in colour between natural daylight and the light from the electric lamp inside the instrument. To obviate this difficulty a special yellow correcting screen is utilized which can be inserted in the path of the rays entering the instrument, making them a complete colour match with the light of the electric lamp. Since absolute values of daylight illumination have very little meaning, the actual total absorption of this screen need not be allowed for. The screen is kept in position both when taking the internal measurements and also whilst making the external comparisons. Obviously the all-important ratio between these two will not be affected by this factor, which will cancel out in the subsequent calculations.

The apparatus can be checked at any time by illuminating the

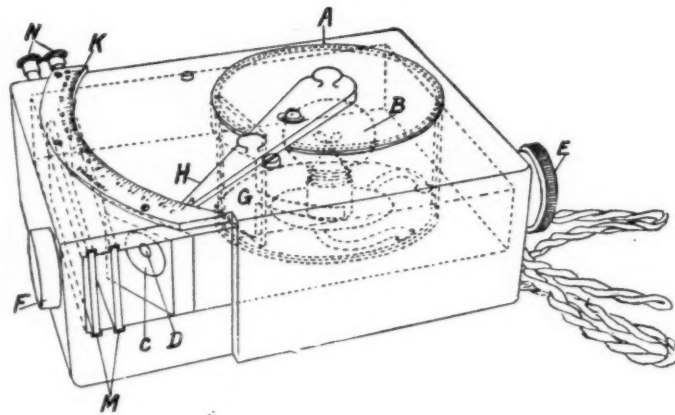


Figure six. The internal mechanism of the "Lumeter."

[Reproduced by courtesy of Messrs. Holophane, Ltd.]

the pointer must be placed in its zero position and allowed to rest on the small stop at this point. The circular lid can then be released and pulled upwards. The accumulator should be kept in good condition, and should never be used when giving less than 3.8 volts, 4 volts being normal. For measuring artificial light the instruments should be returned periodically to the Holophane laboratory for recalibration, if facilities for making the above-mentioned test are not available. For daylight work, which is wholly comparative, exact calibration is not necessary.

The angle of incidence of the light to the normal to the test surface should never exceed 70 deg. In cases where the angle of incidence is greater than this, "normal" readings should be taken and the horizontal illumination, if essential, calculated from these by multiplying by the cosine of the angle of inclination of the test surface in each case. To facilitate this, the Holophane Test Surface holder (figure five) has been designed, which indicates at a glance both the angle of incidence of the light and the angle of inclination of the test surface. This piece of apparatus meets with the requirements of clause 5 of the B.E.S.A. specification No. 230, and must be included in the equipment of the "Lumeter" to satisfy the whole requirements of that specification.

As shown, the rotating arm, carrying a lens at one end and a screen with cross lines at the other, is set so that the pointer attached to it is over the 0 deg. division on the angular scale. The whole apparatus is then swivelled until the image of the light source formed by the lens falls on the cross lines. When this occurs the test surface is truly "normal" to the incident light and the angle of inclination of the test surface from the horizontal is automatically indicated by the other pointer hanging behind the same scale. Since the holder is provided with spirit levels, the test surface can be set for horizontal illumination tests. When this is done, the "optical pointer" can be turned independently until the image again falls on the cross lines. The position of this pointer then indicates the angle of incidence of the light to the normal to the test surface.

The Holophane Zenith

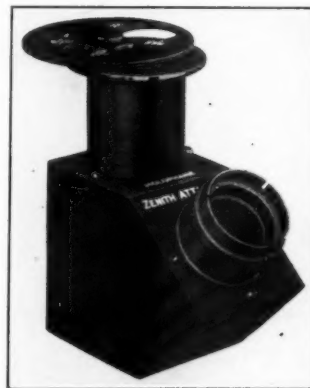


Figure seven. Holophane Zenith Attachment.

[Reproduced by courtesy of Messrs. Holophane, Ltd.]



Attachment (figure seven) is designed to eliminate a number of errors, and its use forms a very accurate method usable on many occasions where other forms would be impracticable. The principle of the attachment is that the exterior test surface is enclosed in a small camera-like box and attached to the "Lumeter." By an arrangement of "stops" the light from a small and defined area of sky is allowed to illuminate the card. All that is necessary in use is to fit the attachment to the end aperture of the "Lumeter" and take a reading out of doors, where the instrument has a clear view of the sky, selecting a stop of suitable aperture to bring the reading to a convenient part of the scale.

[One of the first who sought to estimate in a scientific manner the amount of light obstructed by buildings was Professor Robert Kerr, who published a treatise relating to the subject in 1865. The methods suggested by the Professor were, however, found to be too complicated in practice. Mr. Henry B. Molesworth, M.I.C.E., in his *Obstruction to Light* (Messrs. E. and F. N. Spon, Ltd.), published in 1902, showed that light must be considered in relation to the spherical surface of the sky, and suggested how the apparent paths of the sun might be indicated on a "planisphere"—or orthographic projection of the sphere. Apparently it was somewhat prior to this date that Mr. James Dod used similar diagrams at Liverpool. It is, nevertheless, important to observe that Mr. Molesworth's planisphere is exactly similar in all respects to the sky projections now used in Right of Light cases. Moreover, his chart for readily determining the apparent paths of the sun will be found helpful.]

[To be continued.]

## IN PARLIAMENT

[BY OUR PARLIAMENTARY CORRESPONDENT]

In the House of Commons on Wednesday, July 28, Mr. Chamberlain, the Minister of Health, introduced his long-promised Rural Housing Bill. The object of the measure is stated to be "to promote the provision of housing accommodation for agricultural workers and for persons whose economic condition is substantially the same as that of such workers, and the improvement of such accommodation, by authorizing the giving of financial assistance towards the reconstruction and improvement of houses and other buildings."

The debate in the House of Commons on the City churches, which was to have taken place on Monday, July 26, has been postponed until the autumn session. It is stated that the supporters of the Union of Benefices and Disposal of Churches (Metropolis) measure realize that at present it would be difficult for them to secure a majority in the Commons.

At question time Mr. Chamberlain informed Major Glyn that 52,308 subsidy houses were completed by local authorities and 66,737 by private enterprise during the twelve months ended June 30 last. The numbers under construction on July 1 were 51,116 and 41,299 respectively. The average prices of parlour-type houses in contracts let by local authorities during the month of June, 1926 (excluding the cost of land and development) was £501, and of non-parlour-type £435. The corresponding prices for the month of June in each of the years 1925, 1924, and 1920 were £485 and £442; £462 and £421; £972 and £860.

Mr. Chamberlain informed Captain Crookshank that statistics were not available showing the total number of houses of alternative methods of construction which were completed during the last twelve months. Estimates based on returns obtained from local authorities in connection with the State-assisted schemes under the Housing Acts of 1923 and 1924 showed that some 15,630 houses had been completed under those Acts by special methods of construction, of which some 12,140 were completed during the twelve months ended July 1 last.

Mr. Buchanan asked the Secretary of State for Scotland if he could state the number of single-apartment houses and two-apartment houses which had been built in Scotland since December, 1919.

Sir John Gilmour said that reliable statistics were available only as regarded the number of subsidized houses built in Scotland during the period mentioned. He was informed that from December 31, 1919, to June 30 last, no single-apartment houses

were built with the aid of subsidy. During the same period 3,958 two-apartment houses with scullery, bathroom, and other conveniences were built with the aid of subsidy. From returns made to the Board of Health by local authorities it appeared that during the period in question the erection of twenty-three single-apartment houses was consented to by the local authorities in terms of sub-section 1 of section 44 of the Housing, Town Planning, etc. (Scotland) Act, 1919, as continued by section 111 of the Housing (Scotland) Act, 1925.

## Housing Progress

Sir K. Wood informed Mr. H. Williams that returns from local authorities of houses built with State assistance show that during the twelve months ended March 31 last, approximately 10,000 houses constructed of concrete or by other special methods were completed.

In answer to a question by Lady Astor, Sir K. Wood said that a constant watch was kept by the Minister of Health upon the trend of house-building prices. An investigation of the reasons for the rise in building costs during the past 2½ years, which was approximately 11 per cent., showed that a rise of wages accounted for from 2½ per cent. to 5 per cent., according to district, and increases in the prices of materials accounted for about 4 per cent. The remainder of the rise in costs was probably partly due to the increase in the number of houses let in contracts, and in the Minister's opinion the existence of the subsidy might have contributed something in this direction.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to June 30, 1926:

	Completed.	Under Construction.
1919 Act .. .. .	25,489	57
Private Subsidy Schemes .. ..	2,324	—
Slum Clearance Schemes .. ..	3,394	2,966
1923 Act—by Local Authorities ..	1,972	1,745
1923 Act—by Private Enterprise ..	6,345	3,100
1924 Act—by Local Authorities ..	1,951	9,443
1924 Act—by Private Enterprise ..	183	47
Demonstration Houses .. ..	17	—
	41,675	17,358

## COMPETITION CALENDAR

The conditions of the following competition have been received by the R.I.B.A.

September 30. Cenotaph for Liverpool. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. Premiums, first, £200; second, £150, provided he is an ex-Service man; third, £100; fourth, £50. The author of the selected design will be paid a commission of 500 guineas, which will include the premium of £200 above-mentioned, and, in addition to preparing all the necessary working drawings and superintending the erection of the work, he will be required to superintend the erection of a full-size wood and plaster model of his design on the site. Particulars from the Town Clerk.

The conditions of the following competitions have not as yet been brought to the notice of the R.I.B.A.

No date. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Sir John Burnet, R.A., British representative on jury of assessors.

No date. Manchester Town Hall Extension. Assessors, Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A.

## THE COMPETITORS' CLUB

SENESCHAL's weekly articles will be discontinued during August, but will reappear as usual in September.

## OBITUARY

In recording the death, which occurred on July 11, of Mr. George Abraham Crawley, I am impelled to offer a word or two on his slightly unorthodox career. Here was an architect of genius who, untrained in any architectural school or office, nevertheless achieved high and enviable distinction in the design and decoration of buildings. His work in both departments reveals exquisite taste and refinement, and his several restorations of old houses were done with scholarly knowledge deftly applied. His method of arriving at his admirable results was as tentative and tedious as that of Balzac in writing novels. As Balzac exacted proof after proof from his long-suffering printers, revising laboriously and repeatedly until at long last his fastidious taste was satisfied, so Crawley, having unfolded his ideas to a conventionally-trained architectural draughtsman, would correct the drawings until, finally, they took the shape of the building he had conceived. Such a mode of working seems rather wasteful and unsystematic, but in this instance it was justified by the result. I have often suspected that Wren and some others built up or worried out their designs in some such muddling way. It would be little short of ridiculous to infer from such illustrious examples of independence of technical training—independence is hardly the right word where there was really so much dependence on the trained skill of another hand and brain—that architectural training is a husk without substantial kernel. Although it is clearly demonstrable that occasionally genius may rise superior to technical training, yet it is nevertheless equally true that the average natural man, being no genius, needs in his nonage the best help he can get, and plenty of it. For every "born architect" there must be nine-hundred-and-ninety-and-nine who are "made" in the schools. Besides, Mr. Crawley's excellent designs could not have materialized without the aid of a regularly qualified interpreter.

J. F. MCR.

*Mr. A. J. T. Ellison*

Mr. A. J. T. Ellison, the well-known Preston architect, had a seizure in the Exchange Hotel, Preston, and died before a doctor could be obtained.

*Mr. Robert Dixon*

The death has occurred at his residence, Park Grove, Barnsley, of Mr. Robert Dixon, L.R.I.B.A., in his seventy-fifth year after a long illness. He was articled to the late Mr. Perkins, of Leeds, and started in practice in Barnsley fifty-five years ago. He had a large and varied practice, and carried out much important work in Barnsley and the neighbourhood. Among his works were the Cooper Nurses' Home, the Cooper Art Gallery, the Barnsley Workhouse, New St. Mary's Church Schools, St. Barnabas Mission Church, the Burton-on-Trent markets, Stacey Memorial Vicarage at Grenoside, Doncaster G.S. extensions, and cemeteries at Ardsley and Crigglestone, all of which were won in competition. Recently he had been responsible for housing schemes at Darton, Kexbro, and Shepley.

*Mr. W. H. Syme*

We regret to record the death, at Watford, of Mr. William Henry Syme, at the age of eighty-one. A Fellow of the R.I.B.A., Mr. Syme first went to Watford in 1868, and was for some time with Messrs. Sedgwick and Weall. Among the buildings he designed were St. Matthew's Church, Oxhey, the old Conservative Club at the corner of High Street and Clarendon Road (now converted into shops and offices), Alexandra and Chater Schools. For

twelve years he was a member of the Watford Board of Guardians, and was also a member at one time of the East Grinstead Urban District Council.

*Professor Gourlay*

The death has taken place at a nursing home in Glasgow, of Professor Gourlay, P.E.C., F.R.I.B.A., F.S.A. (Scot.), professor of architecture and building construction in the Royal Technical College, Glasgow. He was well known in all architectural and building circles. He was a professor of the School of Architecture, which is a composite body partly connected with the Royal Technical College and the Glasgow School of Art. He was the author of standard works on Building Construction and Orders of Architecture, and other relative subjects. While a native of Edinburgh, Professor Gourlay was educated at Glasgow University. He was appointed lecturer in the Royal Technical College in 1888, and his appointment as professor on architecture and building in the College was made in 1895. He was in his sixty-first year.

## WILLS

Mr. Stanley Miles Spoor, of Oxford Mansions, Oxford Circus, W., architect (net personality £7,224), £7,600.

Mr. Frederick William Dorman, A.R.I.B.A., Duston, Northants, £10,604.

Mr. Thomas Alfred Cordery, of Abbotshall Road, Catford, S.E., partner in the firm of Messrs. Browett, Taylor, and Cordery, architects, who died on April 4, aged fifty, left property of the gross value of £11,660, with net personality £9,315.

## NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

## LATEST PATENT APPLICATIONS

- 16427.—Fergusson, A.—Buildings. June 30.
- 16564.—Haddon, W.—Fixing glass to sloping roofs. July 1.
- 16473.—Schlosser, G.—Conveying building materials. June 30.
- 17232.—Bailes, T. F.—Building construction. July 9.
- 16998.—Gay, G.—Means for securing roofing slates. July 7.
- 17131.—Jones, D. Palmer.—Shuttering plates for concrete structures. July 8.
- 17130.—Wollaway, F.—Chimney tops, etc. July 8.

## SPECIFICATIONS PUBLISHED

- 253962.—Bloomfield, H.—Construction of concrete houses and like structures.
- 254006.—Burditt, T. H. F.—Filler blocks or tiles for structures of concrete and similar materials.
- 254008.—Burditt, T. H. F.—Walls and similar structures of concrete or similar material.
- 254018.—Fox, C. J.—*In situ* building with concrete or the like.
- 234,085.—Chanard, A.—Chimneys.
- 254070.—Cramer, J.—Shuttering for use in building cement and like walls.
- 254524.—Harris, W.—Casting of concrete walls *in situ*.
- 254594.—East, M. D.—Storage buildings.

## ABSTRACT PUBLISHED

- 251460.—Whiteside, J. M.—Joist strutting.
- 251967.—Bavegem, E. Van, Château de et a Meulbeke, Belgium. Not yet accepted. Walls; ventilation.

## LAW REPORTS

**DILAPIDATIONS: ALLEGED RELEASE**  
*Richmond v. Savill. Court of Appeal. Before*  
*Lords Justices Bankes, Atkin, and Sargant*

This was an appeal by the plaintiff, Mr. F. H. Richmond, of Leylands, Wotton, from a judgment of Mr. Justice Finlay, sitting in the King's Bench Division, in favour of the defendant, Mr. A. E. Savill, whom plaintiff sued as executor of the late Lady Katherine Humphrey, to recover £38 odd rent, alleged to be due, and for damages for alleged breach of covenant in respect of the lady's tenancy of The Grove, Hollington, St. Leonards, which she had held on a lease from the plaintiff.

Mr. A. Neilson, k.c., appeared for the appellant, and Mr. J. A. Hawke, k.c., for the respondent.

Mr. Neilson explained that the plaintiff's case before Mr. Justice Finlay was that the late Lady Humphrey was granted a lease of the premises in 1911, which was surrendered in 1923, when a new lease of part of the premises was granted to the deceased lady. The plaintiff said that the tenant covenanted to keep the inside, outside, stables, etc., in good and tenantable repair and condition, and at the expiration of the term pay the lessor £300 in satisfaction of all claims for dilapidations. The new lease was for twenty-one years from September, 1922. Lady Humphrey died in 1924, and the defendant, as her executor, continued in possession till May, 1925. An offer had been made to the defendant on behalf of the plaintiff for the former to be released from the dilapidations obligations provided possession was given up not later than March 25, 1925. That offer, plaintiff said, was not accepted, and defendant continued in possession till May, 1925, and, therefore, plaintiff alleged there had been no release from the dilapidations obligation and that rent was payable from March 25, 1925, to May, 1925. The defence was that no rent was due and that there had been a release from the repairing obligations of the covenant when the new lease was granted to the late Lady Humphrey in 1923. Mr. Justice Finlay held that the claim for rent could not be sustained and that the surrender of the 1923 lease relieved the defendant from all liability under all or any of the covenants. He accordingly gave judgment for the defendant with costs, and from this result the plaintiff now appealed. Counsel said his contention was that the learned judge had misdirected himself in deciding in effect that the surrender of the 1923 lease released any rights accruing to the landlord prior to the surrender. He submitted that the learned judge had mistaken the effect of the surrender. Counsel cited a decision of the Court of Appeal holding that breaches of covenant by the lessee anterior to the surrender of the lease gave a right of action to the landlord for the breaches, and other decisions to the effect

that a surrender did not destroy existing causes of action.

Mr. Hawke, k.c., upheld the decision of the judge in the Court below, and submitted that the correspondence showed that what had happened was something more than a surrender, and was a surrender and an express release. The surrender operated as a surrender by the tenant of his privileges under the lease, and the release was the excusing by the landlord of any breaches of covenant by the tenant.

The Court allowed the appeal with costs.

Lord Justice Bankes in the course of his judgment said the question really depended upon whether a letter written by the landlord's brother to the defendant as executor of the lessee in November, 1924, operated as a surrender and to free the defendant from all liability under the covenants in the lease. Mr. Justice Finlay had held that the surrender operated to extinguish the liabilities of the parties under the lease.

His lordship thought the terms of the surrender must be construed according to the letter of November 15, 1924. What was in contemplation between the parties at that time was not the question of dilapidations or the obligation of the tenant to pay damages for breach of covenants, but was as to the terms on which the defendant as the tenant should be allowed to depart from the premises. He thought the release was confined to the question of whether the tenancy should be continued beyond the date provided for in the lease and had nothing whatever to do with the obligation of the tenant for breaches of covenant. In his opinion the executor was not released from the obligation of repair by the agreement to surrender the lease as put forward by the respondent.

The other Lord Justices concurred.

**ARCHITECTS AT LAW OVER A  
NOTICE BOARD**

*Tomkins and others v. Coates. King's Bench Division. Before Mr. Justice Horridge and a Special Jury*

This was an action by Mr. A. S. Tomkins and Mr. E. C. Homer, carrying on business as Tomkins, Homer and Ley, architects, surveyors, and estate agents, of Frinton-on-Sea, Essex, against Mr. F. C. Coates, also of Frinton-on-Sea, claiming damages for an alleged libel and an injunction. Defendant, by his defence, denied that the words complained of were capable of bearing a defamatory meaning.

Mr. Comyns Carr, k.c., and Mr. Ewart Wort appeared for the plaintiffs; Mr. Thorn Drury, k.c., and Mr. Gerald Dodson for the defendant.

Mr. Carr, in opening the case, said that Mr. Coates had erected houses at Frinton for sale or letting, and for some years Messrs. Tomkins, Homer and Ley had acted as his agents. He appeared to have been a little cantankerous in his dealings with them, and finally, on April 13, 1925, he wrote informing them that "as from this date I shall be unable to consider intro-

ductions from you for the letting or selling of my houses." He then placed in the gardens of two of his houses large boards, on each of which was a notice that the houses were for disposal. There was also a further notice in very prominent characters at the bottom of each board which was in the following terms: "Messrs. Tomkins, Homer and Ley are not agents for this house." Those words were in red, except the word "not," which was printed in black so as to draw in the most distinct way the attention of the public to the fact that Mr. Coates declined to recognize the plaintiffs as his agents.

A man was entitled to withdraw his patronage from any firm and to communicate that fact to anyone with whom he was likely to do business. He (counsel) submitted, however, that a public announcement of so grossly insulting a character as that in the present case constituted a grave libel. Messrs. Tomkins, Homer and Ley suggested that the ordinary person would attach to the words the meaning that they had been guilty of some discreditable conduct towards Mr. Coates which had caused him to withdraw the agency and to think it his duty to warn persons against doing business with them, or that Mr. Coates meant to convey to the public that they were the sort of people who, if Mr. Coates did not put up a warning notice, would be likely to represent that they were entitled to deal with his property when they were not.

Mr. Thorn Drury, at the close of plaintiffs' case, submitted that there was no case to go to the jury.

His lordship, after hearing Mr. Carr, held that the action was clearly not sustainable. The words according to their ordinary and natural meaning were not capable of bearing a defamatory meaning. The statement was true. He entered judgment for defendant, with costs.

**DAMAGE TO ESTATE BY FLOODING**  
*Sherwood-Hale v. Selwyn and Ravell. Chancery Division. Before Mr. Justice Eve*

This was an action by the plaintiff against defendants, as executors, for an injunction to restrain them from causing or permitting water stored on their land in connection with the Nind Mills at Kingswood, Wootton-under-Edge, to overflow on to adjoining land owned by the plaintiff. Plaintiff also sought for damages in respect of the flooding of his land.

Mr. Gover, k.c., and Mr. J. N. Gray appeared for the plaintiff, and Mr. Vaisey, k.c., and Mr. W. M. Hunt for the defendants.

Mr. Gover stated that the dispute arose through the flooding of plaintiff's land, by reason, as it was alleged, of the negligent carrying on of a water mill at Nind Mills, Kingswood. The plaintiff was the owner of the Alderley estate, which was quite near the Cotswolds. The Little Avon flowed along the northern boundary of the plaintiff's land and a stream called Hams



Brook flowed close to the western boundary. Many years ago the defendants' predecessors in title raised the level of the water in the river and brook by the erection of a dam with sluices across the river immediately above the mills, and a pond was thus formed, and the banks of the brook, the river, and the pond were artificially raised to contain the water collected. The defendants had placed at the top of the sluices, overboards, by which the flow of water over the sluices was restricted and the level of the water collected in the pond, the river, and the brook was still further raised. The result was that the water flowed over and through the banks on to the defendants' lands and then on to the plaintiff's land. The overboards were the main cause of the trouble, and plaintiff's contention was that, however long they might have been used, they must be used in a proper way and so as to cause no nuisance to the plaintiff.

Mr. Vaisey said every effort had been made to work the overboards of the weir so that no water should be penned back to do injury to neighbouring owners. Defendants' suggestion was that the trouble of which plaintiff complained came from the river or surface water.

His lordship gave judgment for the plaintiff. He said he was satisfied that there was no serious cause for complaint prior to comparatively recent years. Plaintiff, however, had made out his case that, owing to either mismanagement of the sluices, the absence of supervision, or by neglect to repair the banks of what was called the New Cut, his covert and meadow had been flooded so that serious damage was caused to the herbage and the land, both for the purpose of growing hay and feeding stock. His lordship estimated the damages at £55, and gave judgment for that amount. He granted plaintiff an injunction to restrain a repetition of the trouble, but in view of the obvious desire of defendants' manager to see that there was no further cause for complaint he would not grant the injunction at the moment, but give liberty to apply should occasion arise. Plaintiff would have the main costs of the action.

#### LIBEL AGAINST ARCHITECT AND ANOTHER

*M. L. Meyer v. Dury and another. King's Bench Division. Before Mr. Justice Fraser*

This was an action for libel and was settled.

Mr. Vos, for the plaintiffs, said the action had been settled. He said the plaintiff firm was one of the very largest timber merchanting firms in the United Kingdom, and the principal director of that firm, Mr. Montague Meyer, was, during the war, the Government purchaser of timber, and to-day held the important position of timber purchaser for the London County Council for the housing schemes at Hendon and Edgware. In that latter capacity Mr. Meyer purchased approximately £100,000 worth of timber a year for the London County Council. That was, of course, a position which he regarded with some

degree of pride, and one which was of the utmost fiduciary importance.

The defendants were Mr. A. B. Dury and Mr. H. A. Smith. Mr. Dury was the consulting architect, and Mr. Smith the financial director, of the South-West London Building Estates.

In January of this year an order was placed by the defendants with the plaintiff firm for a quantity of timber. That timber was delivered, and a dispute arose over the correctness of the deliveries made or, at any rate, of the prices charged for the quantity of timber actually delivered. The dispute was considered between representatives of the plaintiff firm and the defendants, and, so far as the plaintiffs were aware, the matter had been satisfactorily explained. It appeared that whereas the defendants were under the impression that the full quantity of timber had not been delivered, the plaintiffs, as they thought, had satisfied the defendants' representative that the full quantity had been delivered, and that an arithmetical error had been made by the defendants' representative in calculating the actual money values of that timber.

Being under the impression that that matter had been satisfactorily explained, the plaintiffs were rather surprised at the subsequent correspondence.

On March 12 they received a letter from Mr. Smith asking them to submit a complete detailed list of all units of timber, under their respective headings, delivered at the premises. The statement asked for was delivered, and then, on March 25, came the following letter:—

"Dear Sirs,—With regard to your account, dated January 20, 1926, kindly note the quantity of flooring there stated does not agree with the quantity measured upon the site by a considerable amount. The item showing deficiency has, at my request, been measured by my architect, a copy of whose report I enclose for your information. I fully appreciate that my representative having signed to the effect that delivery was in order at time of unloading limits your liability, and I herewith enclose cheque value £24 2s. 10d., balance due, and terminating all future dealings."

With that letter was enclosed the report from Mr. Dury to Mr. Smith, which was as follows:—

"Acting upon your request with regard to the quantity of 7 in. by 1 in. flooring actually upon the above site, I have measured and verified the clerk of the works' figures, calculating for the usual loss and waste, and find a minimum deficiency of 50 squares against the delivery statements dated January 22 and 28, comprising a total quantity of 173,749 squares. These two delivery statements being signed by your representative on the site at the time of delivery as correct, either in error, ignorance or otherwise, relieve the timber merchant of any further liability, and under the circumstances I can only advise settlement of the balance due to date of £24 2s. 10d.

I would suggest, as there appears no forthcoming explanation, all future transactions be conducted with one of the many British firms of repute whose reputation is sufficient to guarantee an honest transaction. Should you decide, I shall be pleased to give all particulars and records necessary."

Counsel said the plaintiffs took a very serious view of the letter, the innuendoes being clear and serious. They were to the effect that the firm was not a British firm; that it was not a firm of repute; and that its reputation was not sufficient to guarantee an honest transaction. It was subsequently discovered that one of the defendants, Mr. Dury, was an architect employed by the London County Council.

Mr. Dury had sent the following apology to the plaintiffs:—

"Sirs,—You have commenced an action against me claiming damages for libel in respect of a report written by me on March 25, 1926. . . . I now confess that I wrote that report under an entire misapprehension as to the facts. I hereby unreservedly withdraw every word in that report which in any way reflects upon the status of your company. I admit that there never was any foundation for any of the charges which I made. I deeply regret that I ever made them, and I tender you my sincere apologies therefor. I trust that you will accept this apology in the spirit in which it is offered, and as the best means which it is in my power to make for the injury and annoyance which may have been caused to your company or its directors. I furthermore make this apology publicly in Court with the object of giving full publicity thereto."

Counsel said that a letter in the same terms had been received from the other defendant, and the parties had agreed that the case should be settled on terms. He asked for judgment for the plaintiffs on the terms indorsed on counsel's briefs.

Mr. Burt, for the defendants, said that he could do no more than say that they were fully satisfied that the statements which had been read reflecting upon the plaintiff company were without any foundation. They regretted that those statements were ever made, and, on their behalf, he was instructed to tender to the plaintiffs their sincere apologies.

His lordship expressed the opinion that defendants had taken a wise and proper course and had apologized handsomely and done what was right in the matter.

#### WAGE-RATE DEFAULT CIRCULARS. LONDON MASTER BUILDERS' ASSOCIATION

With reference to an action for alleged libel brought by Messrs. Bovis, Ltd., against Mr. Thorne and other officers and members of the London Master Builders' Association, and recently heard in the High Court of Justice, we understand from Messrs. Bovis, Ltd., that a notice of appeal against the judgment in this action has now been lodged on their behalf. The appeal is expected to be heard in October next.



## THE WEEK'S BUILDING NEWS

*A Neighbour for Bush House*

The L.C.C. has had an offer of £17,000 a year for the site east of Bush House, Aldwych.

*Housing at Hornsey*

Plans of twenty-one houses in Wood Vale have been passed by the Hornsey Town Council.

*Plans Passed at Ealing*

Plans of ninety-one houses, which will shortly be in course of erection, have been passed at Ealing.

*More Houses at Kingston*

The Kingston Council has decided to proceed with the erection of fifty more houses at a cost of £25,743.

*Workers' Flats for Kensington*

The Kensington Council propose building sixteen workers' flats at Threshers Place at a cost of £12,000.

*A Swimming Bath for Taunton*

The Taunton Corporation has adopted a scheme for the erection of a covered-in swimming bath at Priory Bridge Road.

*A New School at Chislet*

A school is to be built at Chislet colliery village, Kent, at a cost of £9,000.

*Bathing Improvements at Plymouth*

The Plymouth Town Council has applied to the Ministry of Health for sanction to borrow £13,250 for enlargements to the Tinside bathing place.

*Baths Proposals at Nottingham*

The Nottingham Corporation Baths Committee has approved plans for a public washhouse at Sneinton, and a filtration plant at Victoria Baths.

*Municipal Buildings at Yeovil*

New municipal offices, a library, and museum are being erected at Yeovil, in the centre of the town. The cost of the erection of the new buildings will be £20,000.

*Housing at Cradley Heath*

The Rowley Regis Urban District Council, Staffs, has decided to proceed with the erection of sixty-two municipal houses at Cradley Heath.

*Housing at Banbury*

The Banbury Corporation has approved a scheme for the erection of seventy-four houses of the non-parlour type and twelve of the parlour type.

*Housing in Essex*

The Essex Guardians and Rural Council has had the approval of the Ministry of Health for the erection of four houses at West Hanningfield, and six each at Ingatestone and Stock.

*A Cinema for Sheffield*

Plans for the erection of a large cinema to Barker's Pool, Sheffield, by the Provincial Cinematograph Theatres, Ltd., have been presented to the plans subcommittee of the Sheffield City Council.

*More Accommodation for the L.C.C.*

Despite the provision of the new County Hall, the L.C.C. require additional office accommodation, and the possibility of re-occupying the old County Hall at Spring Gardens is under consideration.

*Housing at Eton*

On the recommendation of the Building By-laws Committee, plans for seventy new houses have been approved by the Eton Rural District Council, in addition to nine alterations to premises, and one estate lay-out.

*Developments at Balkwell*

The Housing Committee of the Tyne-mouth Town Council has under consideration a scheme for the erection of forty-nine houses of three rooms and twenty-three houses of four rooms in Ogle Terrace, Balkwell.

*Extensions to a Sheffield Fire Station*

The city architect of Sheffield has been instructed by the Watch Committee to prepare further plans, in addition to those already accepted, for the enlargement and improvement of the fire brigade station in Rockingham Street, at an estimated cost of £30,000.

*A Rescinded Housing Scheme*

The Callington Urban District Council has decided to rescind all previous resolutions regarding the Callington housing scheme and to make application to the Ministry of Health for permission to sell the site in Launceston Road.

*A Housing Scheme Abandoned*

At a recent meeting of East Lothian Western District Committee at Haddington it was reported that the Housing Committee had decided to abandon the proposed joint housing scheme with the Cockenzie Town Council owing to difficulties being placed in the way as to a suitable site.

*L.C.C. Housing Schemes*

Among the proposals of the Housing Committee of the London County Council is a scheme involving an expenditure of £656,372 for the development of the Castelnau estate. It is proposed to erect about 657 houses, and if a further plot of land can be acquired, this number will be increased to about 694. The committee further recommend expenditure of £55,000 for an improvement scheme in respect of unhealthy areas in Camberwell. The scheme is to provide rehousing accommodation for 756 persons.

*The Margate Bathing Pavilion*

The new bathing pavilion on the Marine Terrace at Margate has been built at a cost of about £30,000. The structure is 306 ft. long by 88 ft. wide, extends 214 ft. from the promenade to the sea, and accommodates 320 bathers. A café, four kiosks, and space for a band are also provided.

*Improvements at Cheltenham*

The Cheltenham improvement scheme has received the approval of the Town Council. Its estimated cost is £10,500 (£500 of which is publicly subscribed), and it is proposed with the money to add another public park to the amenities of the town by converting the land adjoining the River Chelt into a public recreation ground.

*Subsidies for Carshalton*

The Carshalton Urban District Council has received the approval of the Ministry of Health for the granting of subsidies for the erection of fifty houses. The Finance Committee recommends that application be made for the sanction of the Ministry of Health to the raising of a further loan of £50,000.

*Housing in the Dublin District*

The South Dublin Rural District Council has approved a scheme for the building of sixty cottages in the district. The Government grant for the cottages is £23,000. Sixteen of the cottages are to be in Rathfarnham, fourteen in Crumlin, two in Whitechurch, nineteen in Chapelizod, and nine in Clondalkin.

*Housing at Oldham*

The Oldham Town Council proposes to build 302 houses at a cost of £134,660, or an average of just over £445 per house. The houses are to be erected at Greenacres and Barrowshaw, to accommodate people who will be displaced by the sweeping away of a large slum area in the centre of the town.

*Amended Plans at Bideford*

The Bideford Urban District Council has adopted amended plans and specifications for the proposed houses at Handy Cross, and has agreed to invite new tenders. It was also decided to send plans and specifications to the Devon County Council for the improvement of the railway bridge approach to Barnstaple Street.

*Great Ouseburn Housing Schemes*

Plans have been passed by the Great Ouseburn Rural District Council for six subsidy houses on the Carr Lane estate, Acorn, other dwellings at Upper Poppleton, and four on land adjacent to the Knapton Road, Acorn. The Housing Committee has had before them schemes for the erection of eight houses each in the villages of Aldborough, Staveley, and Whixley, at a total cost of over £14,000.

## RATES OF WAGES

		I		II				I		II				I		II	
		s.	d.	s.	d.			s.	d.	s.	d.			s.	d.	s.	d.
A ABERDARE	S. Wales & M.	1 8	1 3	1 7	1 2	A E Glamorgan	S. Wales & M.	1 8	1 3	A <sub>2</sub> NANTWICH	N.W. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Aberavenny	Do.	1 7	1 2	1 6	1 1	A <sub>1</sub> Glamorgan	Monmouthshire	1 8	1 3	A <sub>1</sub> Neath	S. Wales & M.	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Abingdon	S. Counties	1 6	1 1	1 5	1 0	B Exeter	S.W. Counties	1 7	1 2	A <sub>1</sub> Nelson	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Accrington	N.W. Counties	1 6	1 2	1 5	1 1	B <sub>2</sub> Exmouth	S.W. Counties	1 5	1 1	A <sub>1</sub> Newcastle	N.E. Coast	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Addlestone	S. Counties	1 6	1 2	1 5	1 1					A <sub>1</sub> Newport	S. Wales & M.	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Adlington	N.W. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Felixstowe	E. Counties	1 6	1 1	A <sub>1</sub> Normanton	Yorkshire	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Airdrie	Scotland	1 8	1 3	1 7	1 2	A <sub>1</sub> Filey	Yorks	1 6	1 2	A <sub>2</sub> Northampton	Mid. Counties	1 7	1 2	1 7	1 2	1 7	1 2
A <sub>1</sub> Aldeburgh	E. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Fleetwood	N.W. Counties	1 8	1 3	A <sub>1</sub> North Staffs.	Mid. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Altrincham	N.W. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Folkestone	S. Counties	1 4	1 0	A <sub>1</sub> North Shields	N.E. Coast	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Appleby	N.W. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Fromham	N.W. Counties	1 8	1 3	B <sub>1</sub> Norwich	E. Counties	1 6	1 1	1 6	1 1	1 6	1 1
A <sub>1</sub> Ashton-under-Lyne	N.W. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Frome	N.W. Counties	1 4	1 0	A <sub>1</sub> Nottingham	Mid. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Atherstone	Mid. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> Nuneaton	Mid. Counties	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Aylesbury	S. Counties	1 4	1 0	1 3	9												
B BATH	S.W. Counties	1 6	1 1	1 5	1 0	A GATESHEAD	N.E. Coast	1 8	1 3	B OAKHAM	Mid. Counties	1 5	1 1	1 5	1 1	1 5	1 1
B <sub>1</sub> Banbury	S. Counties	1 4	1 0	1 3	9	B <sub>1</sub> Gillingham	S. Counties	1 5	1 1	A <sub>1</sub> Oldham	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Bangor	N.W. Counties	1 5	1 1	1 4	10	B <sub>1</sub> Gloucester	S.W. Counties	1 6	1 1	A <sub>1</sub> Oswestry	Mid. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Barnard Castle	N.E. Coast	1 8	1 3	1 7	1 2	A <sub>1</sub> Goole	Yorkshire	1 7	1 2	B Oxford	S. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Barnsley	Yorkshire	1 8	1 3	1 7	1 2	A <sub>1</sub> Gosport	S. Counties	1 5	1 1								
B <sub>1</sub> Barnstaple	S.W. Counties	1 5	1 1	1 4	10	A <sub>1</sub> Grantham	Mid. Counties	1 6	1 2	A PAISLEY	Scotland	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Barrow	N.W. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Gravesend	S. Counties	1 7	1 2	C Pembroke	S. Wales & M.	1 4	1 0	1 4	1 0	1 4	1 0
A <sub>1</sub> Barry	S. Wales & M.	1 8	1 3	1 7	1 2	A <sub>1</sub> Greenock	Scotland	1 8	1 3	A <sub>1</sub> Perth	Scotland	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Basingstoke	S.W. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Grimsby	Yorkshire	1 8	1 3	A <sub>1</sub> Peterborough	Mid. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Batley	Yorkshire	1 8	1 3	1 7	1 2	B <sub>1</sub> Guildford	S. Counties	1 5	1 1	A <sub>1</sub> Plymouth	S.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Bedford	E. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> Pontefract	Yorkshire	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Bervick-on-Tweed	N.E. Coast	1 7	1 2	1 6	1 1	A HALFAX	Yorkshire	1 8	1 3	A <sub>1</sub> Pontypridd	S. Wales & M.	1 8	1 3	1 8	1 3	1 8	1 3
						A <sub>1</sub> Hanley	Mid. Counties	1 7	1 2	B Portsmouth	S. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Bewdley	Mid. Counties	1 6	1 2	1 5	1 0	A <sub>1</sub> Harrogate	Yorkshire	1 8	1 3	B Preston	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Bicester	Mid. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Hartlepool	N.E. Coast	1 8	1 3								
A <sub>1</sub> Birkenhead	N.W. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Hastings	E. Counties	1 5	1 1	A QUEENS-FERRY	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Birmingham	Mid. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Hatfield	S. Counties	1 5	1 1								
A <sub>1</sub> Bishop Auckland	N.E. Coast	1 8	1 3	1 7	1 2	B <sub>1</sub> Hereford	S.W. Counties	1 6	1 2								
						B <sub>1</sub> Hertford	E. Counties	1 5	1 1	B READING	S. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Blackburn	N.W. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Heysham	N.W. Counties	1 7	1 2	B <sub>1</sub> Reigate	S. Counties	1 5	1 1	1 5	1 1	1 5	1 1
A <sub>1</sub> Blackpool	N.W. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Howden	N.E. Coast	1 8	1 3	A <sub>1</sub> Retford	Mid. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Blyth	N.E. Coast	1 8	1 3	1 7	1 2	A <sub>1</sub> Huddersfield	Yorkshire	1 8	1 3	A <sub>1</sub> Rhondda	S. Wales & M.	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Bognor	S. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Hull	Yorkshire	1 8	1 3	B Valley							
A <sub>1</sub> Bolton	N.W. Counties	1 8	1 3	1 7	1 2	The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains, is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.											
A <sub>1</sub> Boston	Mid. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> Ripon	Yorkshire	1 6	1 2	1 6	1 2	1 6	1 2
B <sub>1</sub> Bourne	S. Counties	1 6	1 1	1 5	1 0					A <sub>1</sub> Rochdale	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Bradford	Yorkshire	1 8	1 3	1 7	1 2					B Rochdale	S. Counties	1 5	1 1	1 5	1 1	1 5	1 1
A <sub>1</sub> Brentwood	E. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> Ruabon	N.W. Counties	1 7	1 2	1 7	1 2	1 7	1 2
A <sub>1</sub> Bridgend	S. Wales & M.	1 8	1 3	1 7	1 2					A <sub>1</sub> Rugby	Mid. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Bridgewater	S.W. Counties	1 5	1 1	1 4	10					A <sub>1</sub> Rugeley	Mid. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Bridlington	Yorkshire	1 7	1 2	1 6	1 1					A <sub>1</sub> Runcorn	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Brighouse	Yorkshire	1 8	1 3	1 7	1 2												
B <sub>1</sub> Brighton	S. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> ST. ALBANS	E. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Bristol	S.W. Counties	1 8	1 3	1 7	1 2					A <sub>1</sub> St. Helens	N.W. Counties	1 8	1 3	1 8	1 3	1 8	1 3
B <sub>1</sub> Brighthelm	S.W. Counties	1 4	1 0	1 3	9					A <sub>1</sub> Scarborough	Yorkshire	1 7	1 2	1 7	1 2	1 7	1 2
A <sub>1</sub> Bromsgrove	Mid. Counties	1 6	1 2	1 5	1 0					A <sub>1</sub> Scunthorpe	Mid. Counties	1 8	1 3	1 8	1 3	1 8	1 3
C Bromley	Mid. Counties	1 4	1 0	1 3	9					A <sub>1</sub> Sheffield	Yorkshire	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Burnley	N.W. Counties	1 8	1 3	1 7	1 2					A <sub>1</sub> Shipley	Yorkshire	1 8	1 3	1 8	1 3	1 8	1 3
A <sub>1</sub> Burslem	Mid. Counties	1 7	1 2	1 6	1 1					A <sub>1</sub> Skipton	Mid. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Burton-on-Trent	Mid. Counties	1 7	1 2	1 6	1 1					A <sub>1</sub> Slough	S. Counties	1 5	1 1	1 5	1 1	1 5	1 1
										A <sub>1</sub> Solihull	Mid. Counties	1 7	1 2	1 7	1 2	1 7	1 2
A <sub>1</sub> Bury	N.W. Counties	1 8	1 3	1 7	1 2	A ILKLEY	Yorkshire	1 8	1 3	A <sub>1</sub> South'pton	S. Counties	1 6	1 2	1 6	1 2	1 6	1 2
A <sub>1</sub> Buxton	N.W. Counties	1 6	1 2	1 5	1 0	A <sub>1</sub> Immingham	Mid. Counties	1 8	1 3	B <sub>1</sub> Southend-on-Sea	E. Counties	1 5	1 1	1 5	1 1	1 5	1 1
						B Ipswich	E. Counties	1 6	1 2								
						C <sub>1</sub> Isle of Wight	S. Counties	1 4	1 0								
B CAMBRIDGE	E. Counties	1 6	1 1	1 5	1 0	A JARROW	N.E. Coast	1 8	1 3								
B <sub>1</sub> Canterbury	S. Counties	1 4	1 0	1 3	9												
A <sub>1</sub> Cardiff	S. Wales & M.	1 8	1 3	1 7	1 2	A KEIGHLEY	Yorkshire	1 8	1 3								
A <sub>1</sub> Carlisle	N.W. Counties	1 8	1 3	1 7	1 2	B <sub>1</sub> Kendal	N.W. Counties	1 5	1 1								
B Carmarthen	S. Wales & M.	1 6	1 1	1 5	1 0	B <sub>1</sub> Keswick	N.W. Counties	1 5	1 1								
B Carnarvon	N.W. Counties	1 5	1 1	1 4	10	B <sub>1</sub> Kettering	Mid. Counties	1 6	1 1								
A <sub>1</sub> Carnforth	N.W. Counties	1 7	1 2	1 6	1 1	A <sub>1</sub> Kidderminster	Mid. Counties	1 6	1 2								
A <sub>1</sub> Castleford	Yorkshire	1 8	1 3	1 7	1 2	B <sub>1</sub> King's Lynn	E. Counties	1 5	1 1								
B <sub>1</sub> Chatham	S. Counties	1 5	1 1	1 4	10												
B <sub>1</sub> Chelmsford	E. Counties	1 5	1 1	1 4	10	A <sub>1</sub> LANCASTER	N.W. Counties	1 7	1 2								
B <sub>1</sub> Cheltenham	S.W. Counties	1 6	1 2	1 5	1 0	A <sub>1</sub> Leamington	Mid. Counties	1 6	1 2								
A <sub>1</sub> Chester	N.W. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Leeds	Yorkshire	1 8	1 3								
A <sub>1</sub> Chesterfield	Mid. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Leek	Mid. Counties	1 8	1 3								
B <sub>1</sub> Chichester	S. Counties	1 4	1 0	1 3	9	A <sub>1</sub> Leicester	Mid. Counties	1 8	1 3								
A <sub>1</sub> Chorley	N.W. Counties	1 8	1 3	1 7	1 2	A <sub>1</sub> Leigh	N.W										

## PRICES CURRENT

## EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. per hour; LABOURER, 1s. 4½d. per hour; NAVVY, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; SCAFFOLDER, 1s. 5½d. per hour; WATCHMAN, 7s. 6d. per shift.

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 13 0
Pit gravel, per yd.	0 18 0
Pit sand, per yd.	0 14 6
Washed sand	0 15 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 19 0
Lias lime, per ton	2 10 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse	£1 3 0
Trailer	£0 15 0
3-ton motor lorry	3 15 0
Steam roller	4 5 0
Steam lorry, 5-ton	4 0 0
Water cart	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube 0 3 0  
Exceeding 6 ft., but under 12 ft., add 30 per cent.

In stiff clay, add 30 per cent.  
In underpinning, add 100 per cent.  
In rock, including blasting, add 225 per cent.  
If basketed out, add 80 per cent. to 150 per cent.  
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd. £0 2 4  
SPREAD and level, including wheeling, per yd. 0 2 4  
PLANKING, per ft. sup. 0 0 5  
do. over 10 ft. deep, add for each 5 ft. depth 30 per cent.

HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. £0 2 1  
do. 6 in. thick, per yd. sup. 0 2 10  
PUDDLING, per yd. cube 1 10 0  
CEMENT CONCRETE, 4-2-1, per yd. cube 2 3 0  
do. 6-2-1, per yd. cube 1 18 0

do. in upper floors, add 15 per cent.  
do. in reinforced-concrete work, add 20 per cent.  
do. in underpinning, add 60 per cent.

LIAS LIME CONCRETE, per yd. cube £1 16 0  
BREEZE CONCRETE, per yd. cube 1 7 0  
do. in lintols, etc., per ft. cube 0 1 6

## DRAINER

LABOURER, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; BRICKLAYER, 1s. 9½d. per hour; PLUMBER, 1s. 9½d. per hour; WATCHMAN, 7s. 6d. per shift.

Stoneware pipes, tested quality, 4 in., per yd.	£0 1 3
do. 6 in., per yd.	0 2 8
do. 9 in., per yd.	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
do. 6 in., per yd.	0 9 2
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cwt.	£2 5 6
Gaskin, per lb.	0 0 5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
do. 6 in., per ft.	0 5 0
do. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 9 0
do. 6 in., per ft.	0 11 0

Note.—These prices include digging and filling for normal depths, and are average prices.  
Fittings in Stoneware and Iron according to type. See Trade Lists.

## BRICKLAYER

BRICKLAYER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.	
London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Firebricks, 2½ in., per M.	11 3 0
Glazed silt, white, and ivory stretchers, per M.	21 10 0
do. Headers, per M.	21 0 0

Colours, extra, per M.	£5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 12 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
do. 9 in. per roll	0 4 9
do. 14 in. per roll	0 7 6
do. 18 in. per roll	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	33 0 0
do. in cement do., per rod	36 0 0
do. in stocks, add 25 per cent. per rod.	
do. in blues, add 100 per cent. per rod.	
do. circular on plan, add 12½ per cent. per rod.	

FACINGS, FAIR, per ft. sup. extra	£0 0 2
do. Red Rubbers, gauged and set in putty, per ft. extra	0 4 6
do. salt, white or Ivory glazed, per ft. sup. extra	0 5 6

TUCK POINTING, per ft. sup. extra	0 0 10
WEATHER POINTING, per ft. sup. extra	0 0 3

GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
do. 1½ in., per yd. sup.	0 6 0
do. 2 in., per yd. sup.	0 7 0

BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
do. vertical, per yd. sup.	0 11 0

SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11

BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0 5 3
do. do. 3 in.	0 6 6

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

## MASON

MASON, 1s. 9½d. per hour; DO. fixer, 1s. 10½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.

Portland Stone:	
Whitbed, per ft. cube	£0 4 7
Basebed, per ft. cube	0 4 8
Bath stone, per ft. cube	0 3 9
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 6 6
York templates seven, per ft. cube	0 6 9
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
do. for every 10 ft. above 30 ft., add 15 per cent.	

PLAIN face Portland basis, per ft. sup.	£0 2 8
do. circular, per ft. sup.	0 4 0

SUNK FACE, per ft. sup.	0 3 9
do. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6

do. sunk, per ft. sup.	0 2 7
do. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0

PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
do. circular, do. per ft. run	0 1 4

HALF SAWING, per ft. sup. £0 1 0  
Add to the foregoing prices if in York stone 35 per cent.

do. Mansfield, 12½ per cent.	
Deduct for Bath, 33½ per cent.	
do. for Chilmark, 5 per cent.	
SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed.	1 9 0
YORK SILLS, W. & T., ft. cub. fixed.	1 13 0

## SLATER AND TILER

SLATER, 1s. 9½d. per hour; TILER, 1s. 9½d. per hour; SCAFFOLDER, 1s. 5½d. per hour; LABOURER, 1s. 4½d. per hour.

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per M:	
Portmadoc Ladies	£14 0 0
Countess	27 0 0
Duchess	32 0 0
Clips, lead, per lb.	0 0 4
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 1 10
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
do. Peggies, per ton	7 5 0

SLATING, 3 in. gauge, compo nails, Portmadoc or equal:

Ladies, per square	£1 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0

WESTMORLAND, in diminishing courses, per square 6 5 0

CORNISH DO., per square 6 3 0

Add, if vertical, per square approx. 0 13 0

Add, if with copper nails, per square approx. 0 2 6

Double course at eaves, per ft. approx. 0 1 0

TLING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 5 6 0

do., machine-made do., per square 4 17 0

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen £0 0 10

STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square 0 10 0

LABOUR only in laying slates, but including nails, per square 1 0 0

See "Sundries for Asbestos Tiling."

## CARPENTER AND JOINER

CARPENTER, 1s. 9½d. per hour; JOINER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour.

Timber, average prices at Docks. London Standard, Scandinavian, etc. (equal to 2nds):

7×3, per std.	£21 0 0
11×4, per std.	31 0 0
Memel or Equal, Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 5 0
do. T. and G., 1 in., per sq.	1 5 0
Planed Boards, 1 in.×11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 2 0
Mahogany, per ft. sup. of 1 in.	0 2 0
do. Cuba, per ft. sup. of 1 in.	0 3 0
Teak, per ft. sup. of 1 in.	0 3 0
do., ft. cube	0 15 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube 0 5 9

do. framed in floors, roofs, etc., per ft. cube 0 6 3

do., framed in trusses, etc., including ironwork, per ft. cube 0 7 3

PITCH PINE, add 33½ per cent.

FIXING only boarding in floors, roofs, etc., per sq. 0 13 6

SARKING FELT laid, 1-ply, per yd. 0 1 6

do., 3-ply, per yd. 0 1 9

CENTERING for concrete, etc., including horsing and striking, per sq. 3 10 0

SLATE BATTENING, per sq. 0 18 6



## PRICES CURRENT; continued.

## CARPENTER AND JOINER; continued.

DEAL GUTTER BOARD, 1 in., on firing, per sq.	£3 5 0
MOULDED CASEMENTS, 1½ in., in 4 sqs., glazing beads and hung, per ft. sup.	0 3 0
DO., DO., 2 in., per ft. sup.	0 3 3
DEAL cased frames, oak sills, 2 in. d.h. sashes, brass-faced pulleys, etc., per ft. sup.	0 4 0
DOORS, 4 pan. sq. b.s., 2 in., per ft. sup.	0 3 6
DO., DO., DO., 1½ in., per ft. sup.	0 3 0
DO., DO., moulded b.s., 2 in., per ft. sup.	0 3 9
DO., DO., DO., 1½ in., per ft. sup.	0 3 3
If in oak multiply 3 times.	
If in mahogany multiply 3 times.	
If in teak multiply 3 times.	
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone:	
Deal, 1 in., per yd. sup., average	0 10 0
DO., 1½ in., per yd., sup., average	0 12 0
DO., DO., 1½ in. maple blocks	0 15 0
STAIRCASE WORK, DEAL:	
1 in. riser, 1½ in. tread, fixed, per ft. sup.	0 3 6
2 in. deal strings, fixed, per ft. sup.	0 3 9

## PLUMBER

PLUMBER, 1s. 9d. per hour; MATE OR LABOURER 1s. 4d. per hour.

Lead, milled sheet, per cwt.	£2 3 0
DO. drawn pipes, per cwt.	2 4 6
DO. soil pipe, per cwt.	2 6 6
DO. scrap, per cwt.	1 9 6
Copper, sheet, per lb.	0 1 0
Solder, plumber's, per lb.	0 1 2
DO. fine, per lb.	0 1 5
Cast-iron pipes, etc.:	
L.C.C. soil, 3 in., per yd.	0 4 1
DO. 4 in., per yd.	0 5 0
R.W.P., 2½ in., per yd.	0 2 0
DO. 3 in., per yd.	0 2 5
DO. 4 in., per yd.	0 3 3
Gutter, 4 in. H.R., per yd.	0 1 5
DO. 4 in. O.G., per yd.	0 1 9

MILLED LEAD and labour in gutters, flashings, etc.

LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0 2 1
DO. ½ in., per ft.	0 2 5
DO. 1 in., per ft.	0 3 3
DO. 1½ in., per ft.	0 4 6

LEAD WASTE or soil, fixed as above,

complete, 2½ in., per ft.	0 6 0
DO. 3 in., per ft.	0 7 0
DO. 4 in., per ft.	0 9 9

CAST-IRON R.W. PIPE, at 24 lb. per

length, jointed in red lead, 2½ in., per ft.	0 2 5
DO. 3 in., per ft.	0 2 10
DO. 4 in., per ft.	0 3 3

CAST-IRON H.R. GUTTER, fixed, with

all clips, etc., 4 in., per ft.	0 2 7
DO. O.G., 4 in., per ft.	0 2 10

CAST-IRON SOIL PIPE, fixed with

caulked joints and all ears, etc., 4 in., per ft.	0 7 0
DO. 3 in., per ft.	0 6 0

Fixing only:

W.C. PANS and all joints, P. or S.,

and including joints to water waste

preventers, each

BATHS only, with all joints

LAVATORY BASINS only, with all

joints, on brackets, each

1 10 0

## PLASTERER

PLASTERER, 1s. 9d. per hour (plus allowances in London only); LABOURER, 1s. 4d. per hour.

Chalk lime, per ton	£2 11 0
Hair, per cwt.	0 18 0
Sand and cement see "Excavator," etc., above.	
Lime putty, per cwt.	£0 2 8
Hair mortar, per yd.	1 7 0
Fine stuff, per yd.	1 14 0
Sawn laths, per bd.	0 2 9
Keene's cement, per ton	5 15 0
Sirapite, per ton	3 10 0
DO. fine, per ton	3 18 0
Plaster, per ton	3 0 0
DO. per ton	3 12 6
DO. fine, per ton	5 12 0

Thistle plaster, per ton	£3 9 0
Lath nails per lb.	0 0 4
LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ½ in., per yd.	0 2 4
DO. vertical, per yd.	0 2 7
RENDER, on brickwork, 1 to 3, per yd.	0 2 7
RENDER in Portland and set in fine stuff, per yd.	0 3 3
RENDER, float, and set, trowelled, per yd.	0 2 9
RENDER and set in Sirapite, per yd.	0 2 5
DO. in Thistle plaster, per yd.	0 2 5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0 0 5
EXTRA, if on ceilings, per yd.	0 0 5
ANGLES, rounded Keene's on Portland, per ft. lin.	0 0 6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0 0 5
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from.	1 11 6
FIBROUS PLASTER SLABS, per yd.	0 1 10

## GLAZIER

GLAZIER, 1s. 8d. per hour.

Glass: 4lbs in crates:

Clear, 21 oz.	£0 0 6
DO. 26 oz.	0 0 7½
Cathedral white, per ft.	0 0 6½
Polished plate, British ½ in., up to 2 ft. sup.	0 2 0
DO. 3 ft. sup.	0 2 6
DO. 7 ft. sup.	0 3 6
DO. 25 ft. sup.	0 4 0
DO. 100 ft. sup.	0 4 6
Rough plate, ½ in.	0 0 6
DO. ½ in., per ft.	0 0 6½
Linseed oil putty, per cwt.	0 16 0

GLAZING in putty, clear sheet, 21 oz.

DO. 26 oz.

GLAZING in beads, 21 oz., per ft.

DO. 26 oz., per ft.

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span

1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz.,

usual domestic sizes, fixed, per ft.

sup. and up

£0 3 6

Glazing only, polished plate, 6d. to 8d. per ft.

according to size.

## DECORATOR

PAINTER, 1s. 8d. per hour; LABOURER, 1s. 4d. per hour; FRENCH POLISHER, 1s. 9d. per hour; PAPERHANGER, 1s. 8d. per hour.

Genuine white lead, per cwt.	£3 11 0
Linseed oil, raw, per gall.	0 3 7
Turpentine, per gall.	0 6 2
Liquid driers, per gall.	0 9 6
Knotting, per gall.	1 4 0
Distemper, washable, in ordinary colours, per cwt., and up	2 0 0
Double size, per firkin	0 3 6
Pumice stone, per lb.	0 0 4
Single gold leaf (transferable), per book	0 1 11
Varnish copal, per gall. and up	0 18 0
DO., flat, per gall.	1 2 0
DO., paper, per gall.	1 0 0
French polish, per gall.	0 19 0
Ready mixed paints, per gall. and up	0 10 6

LIME WHITING, per yd. sup.

WASH, stop, and whiten, per yd. sup.

DO., and 2 coats distemper with proprietary distemper, per yd. sup.

KNOT, stop, and prime, per yd. sup.

PLAIN PAINTING, including mouldings,

and on plaster or joinery, 1st coat,

per yd. sup.

DO., subsequent coats, per yd. sup.

DO., enamel coat, per yd. sup.

BRUSH-GRAIN, and 2 coats varnish,

per yd. sup.

FIGURED DO., DO., per yd. sup.	£0 5 6
FRENCH POLISHING, per ft. sup.	0 1 2
STRIPPING old paper and preparing, per piece	0 1 7
HANGING PAPER, ordinary, per piece	0 1 10
DO., fine, per piece, and upwards	0 2 4
VARNISHING PAPER, 1 coat, per piece	0 9 0
CANTAS, strained and fixed, per yd. sup.	0 3 0
VARNISHING, hard oak, 1st coat, yd. sup.	0 1 2
DO., each subsequent coat, per yd. sup.	0 0 11

## SMITH

SMITH weekly rate equals 1s. 9d. per hour; MATE, do. 1s. 4d. per hour; FLECTOR, 1s. 9d. per hour; FITTER, 1s. 9d. per hour; LABOURER, 1s. 4d. per hour.

Mild steel in British standard sections, per ton	£12 10 0
Sheet steel:	
Flat sheets, black, per ton	19 0 0
DO., Galv., per ton	23 0 0
Corrugated sheets, galv., per ton	23 0 0
Driving screws, galv., per grs.	0 1 10
Washers, galv., per grs.	0 1 1
Bolts and nuts, per cwt. and up	1 18 0

MILD STEEL in trusses, etc., erected,

per ton

DO., in small sections as reinforcement, per ton

DO., in compounds, per ton

DO., in bar or rod reinforcement, per ton

WROT. IRON in chimney bare etc., including building in, per cwt.

DO., in light railings and balusters, per cwt.

FIXING only corrugated sheeting, including washers and driving screws, per yd.

0 2 0

## SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

The measured work price is on the same basis

per ft. sup.

£0 0 2½

FIBRE BOARDINGS, including cutting

and waste, fixed on, but not including studs or grounds, per ft. sup.

from 3d. to

0 0 6

Plaster board, per yd. sup.

from

0 1 7

PLASTER BOARD, fixed as last, per yd. sup.

from

0 2 8

Asbestos sheeting, ½ in., grey flat, per yd. sup.

0 2 3

DO., corrugated, per yd. sup.

0 3 3

ASBESTOS SHEETING, fixed as last, flat, per yd. sup.

0 4 0

DO., corrugated, per yd. sup.

0 5 0

ASBESTOS slating or tiling on, but not including battens, or boards, plain

"diamond" per square, grey

2 15 0

DO., red

3 0 0

Asbestos cement slates or tiles, ½ in. punched per M. grey

17 0 0

DO., red

19 0 0

ASBESTOS COMPOSITION FLOORING:

Laid in two coats, average ½ in. thick, in plain colour, per yd. sup.

0 7 0

DO., ½ in. thick, suitable for domestic work, unpolished, per yd.

0 6 6

Metal casements for wood frames, domestic sizes, per ft. sup.

0 1 6

DO., in metal frames, per ft. sup.

0 1 9

HANGING only metal casement in, but not including wood frames, each

0 2 10

BUILDING in metal casement frames, per ft. sup.

0 0 7

Waterproofing compounds for cement.

Add about 75 per cent. to 100 per cent. to the cost of cement used.

Plywood

3 m/m alder, per ft. sup.

0 0 2

4 m/m amer. white, per ft. sup.

0 0 3½

1 m/m figured ash, per ft. sup.

0 0 5

4 m/m 3rd quality composite birch, per ft. sup.

0 0 1½



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